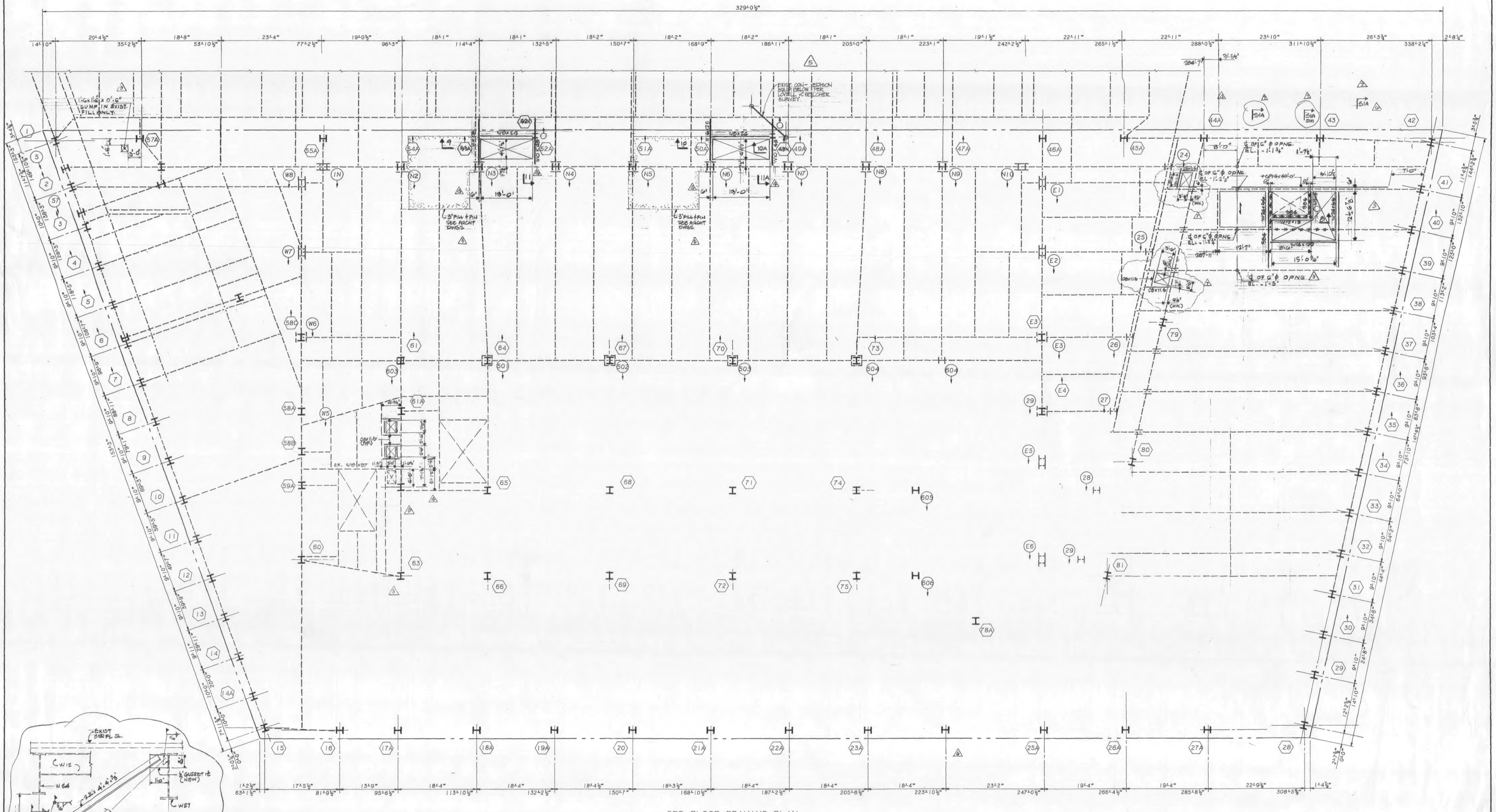
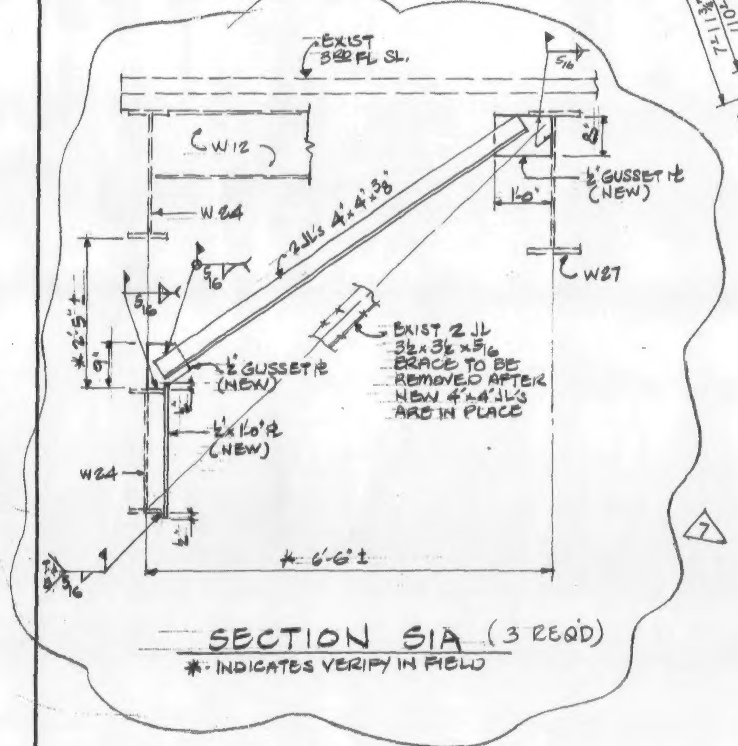


3RD FLOOR FRAMING PLAN



SECTION 51A (3 REQ'D)
#- INDICATES VERIFY IN FIELD

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —×— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. EL.± --- FROM TOP OF STEEL BEAM (3)
11. CR... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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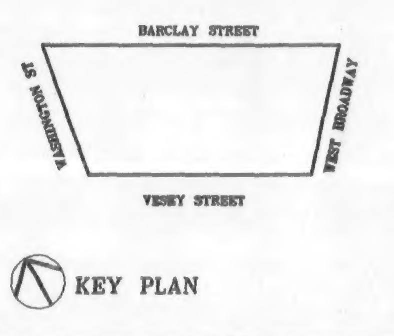

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
7	10-9-89	REVISED AS CIRCLED
6	8-15-89	REVISED AS CIRCLED
5	5/22/89	REVISED AS CIRCLED.
4	5/22/89	REVISED AS CIRCLED
3	4/6/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONSTRUCTION
1	12/19/88	SUBMITTED TO PA FOR APPROVAL OF BASE BUILDING MODIFICATIONS

SOM
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3RD FLOOR FRAMING PLAN

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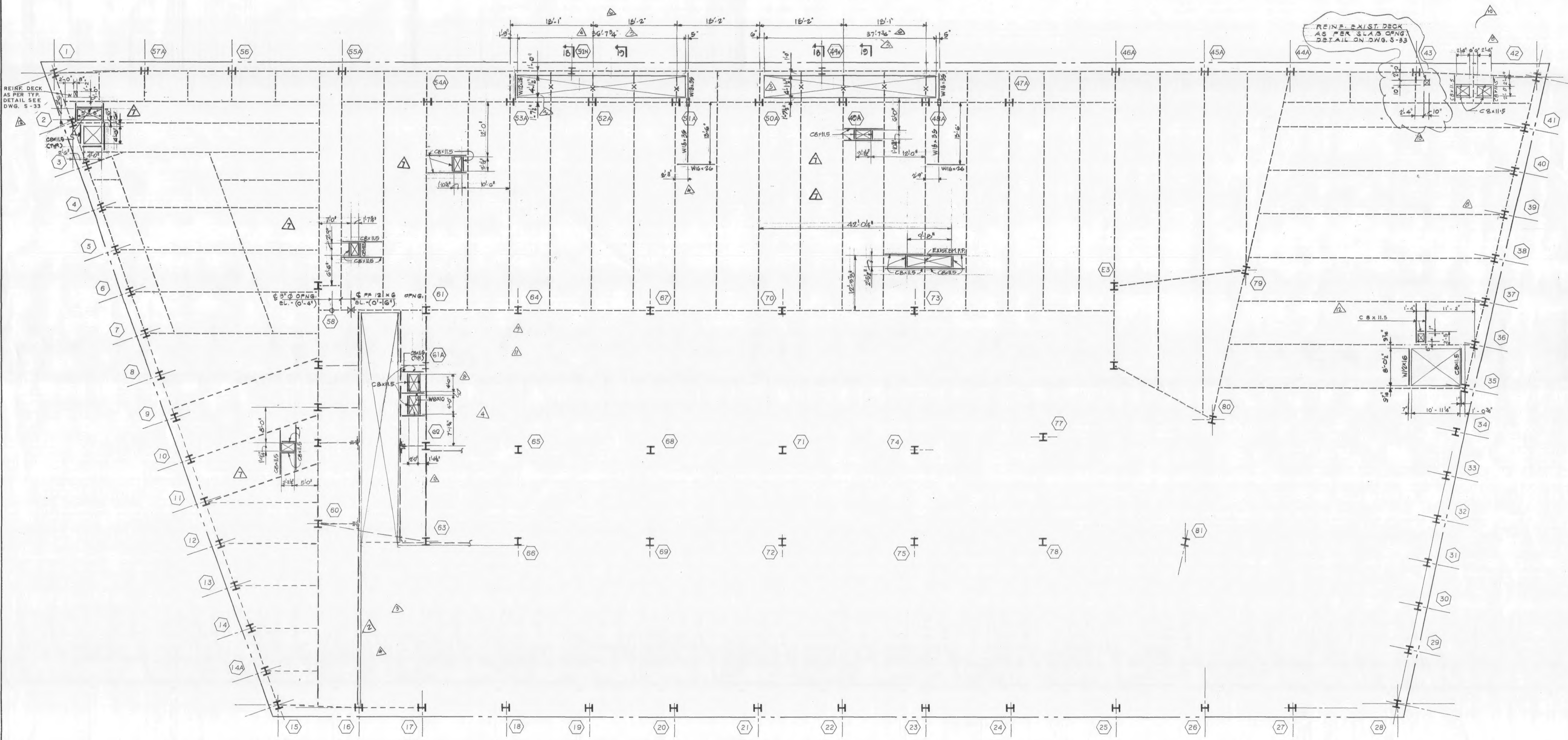

4TH FL. FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟵⟶ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. [X] INDICATES EXISTING SLAB OPENING.
8. ☒ INDICATES NEW SLAB OPENING.
9. ⬡ ..N INDICATES NEW POST OR COLUMN.
10. —X— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ±---- FROM TOP OF STEEL BEAM
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

4

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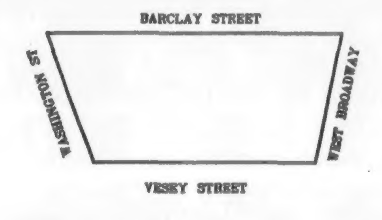

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
13	8-17-90	ISSUED FOR BULLETIN #116
12	6-7-90	ISSUED AS BULLETIN No 94
11	2/12/90	ISSUED FOR BULLETIN NO. 58
10	1/26/90	ISSUED FOR BULLETIN NO 45
9	10/9/89	REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	8/10/89	ISSUED FOR FIELD SKETCH
6	5/22/89	REVISED AS CIRCLED
5	5/22/89	REVISED AS CIRCLED
4	4/6/89	REVISED AS CIRCLED
3	1/20/89	REVISED AS CIRCLED
2	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO PA FOR APPROVAL OF BASE BUILDING MODIFICATIONS

SOM

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4TH FLOOR FRAMING PLAN

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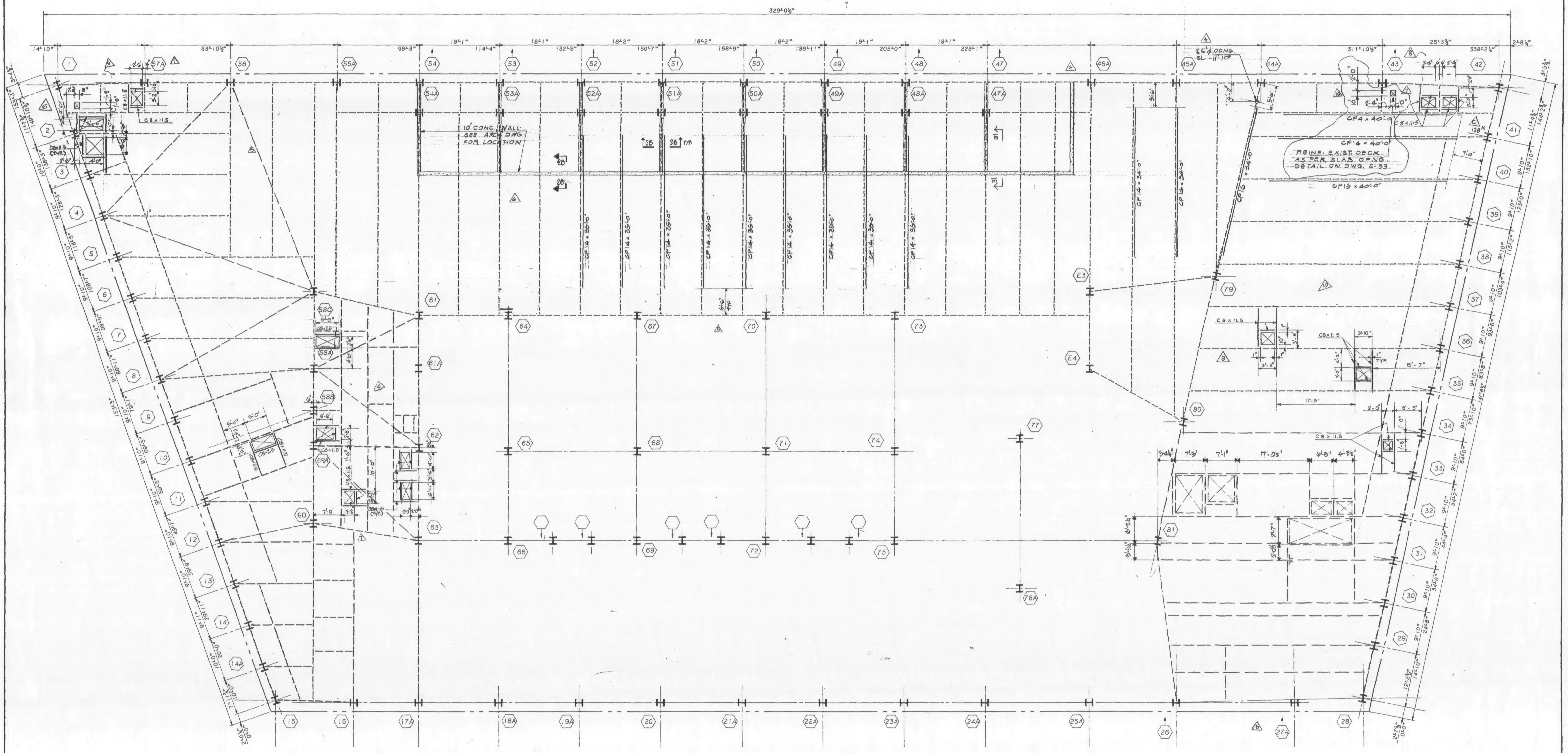

5TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 14" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
12 △ INDICATES TYPE OF EXISTING CONNECTION REINF. DETAIL, SEE DETAIL ON DWG. S-33

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KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10	8-17-90	ISSUED FOR BULLETIN #116
9	6-7-90	ISSUED FOR BULLETIN No 94
8	1/28/90	ISSUED FOR BULLETIN NO. 45
7	8/15/89	REVISED AS CIRCLED
6	8/10/89	ISSUED FOR FIELD SKETCH
5	5/12/89	REVISED AS CIRCLED
4	4-6-89	REVISED AS CIRCLED
	4/ /89	ISSUED TO CON EDISON FOR APPROVAL
3	3/1/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/22/88	REV. AS CIRCLED
	12/19/88	SUBMITTED TO B.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

SOM

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5TH FLOOR FRAMING PLAN

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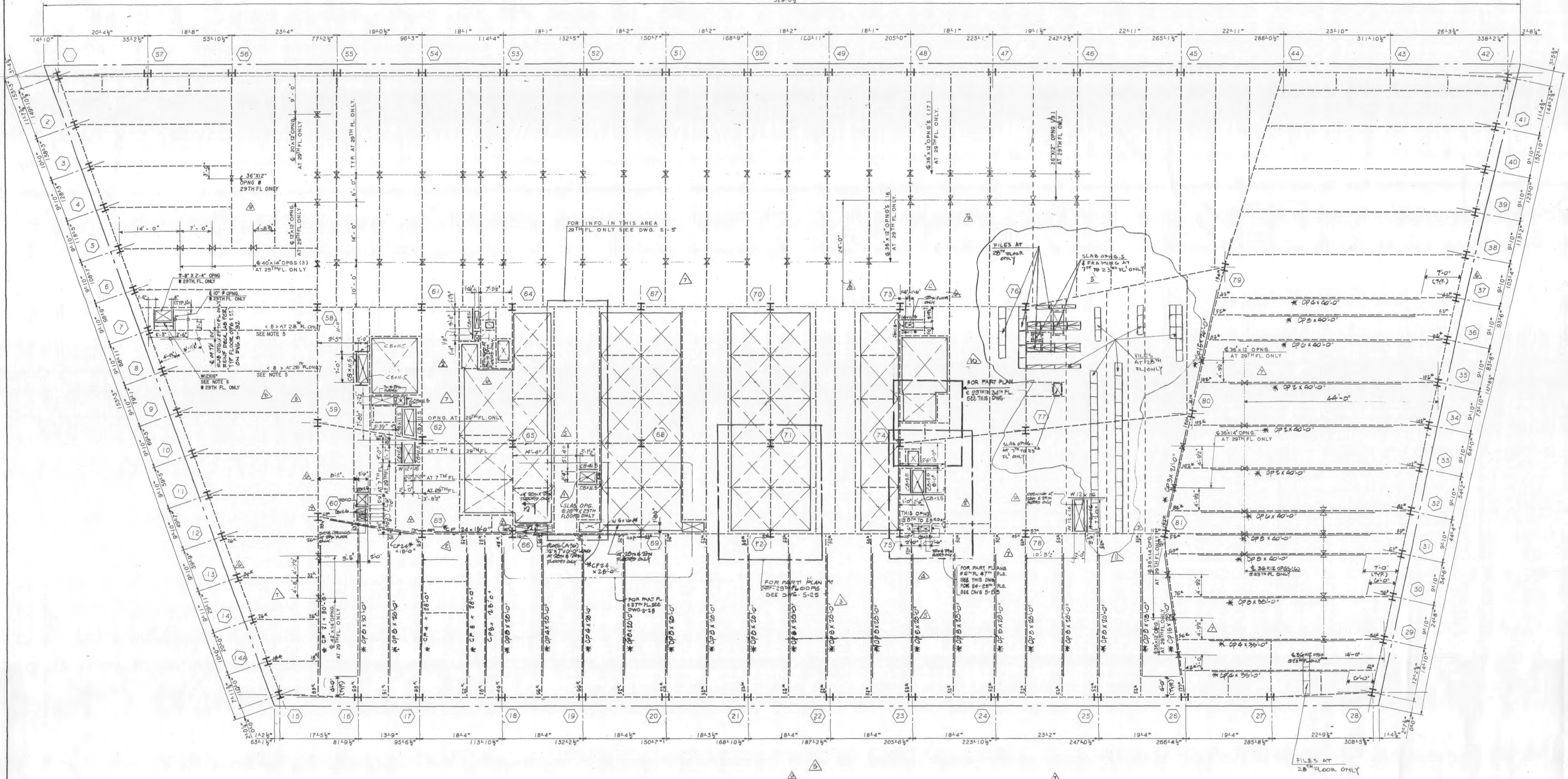
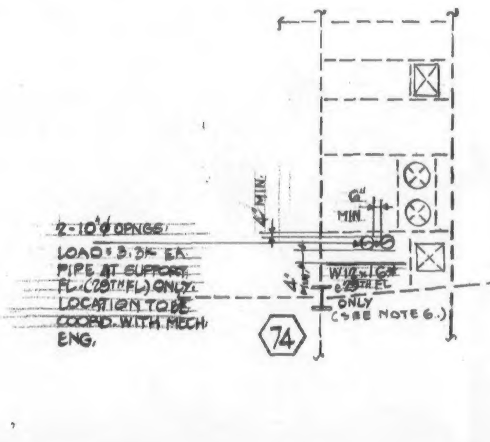


TYPICAL FLOOR FRAMING PLAN - 7TH TO 29TH FLOORS

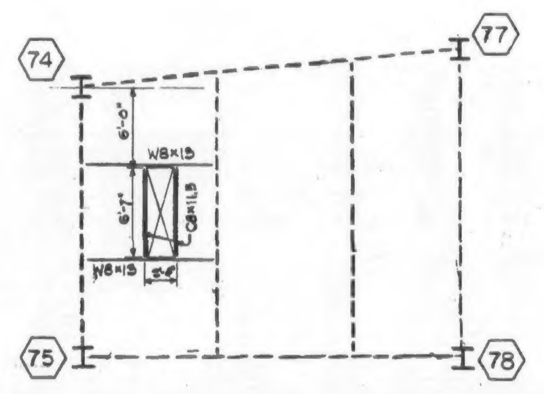
7TH TO 14TH FLOORS AS SHOWN - 15TH TO 29TH FLOORS SIM.

NOTES:

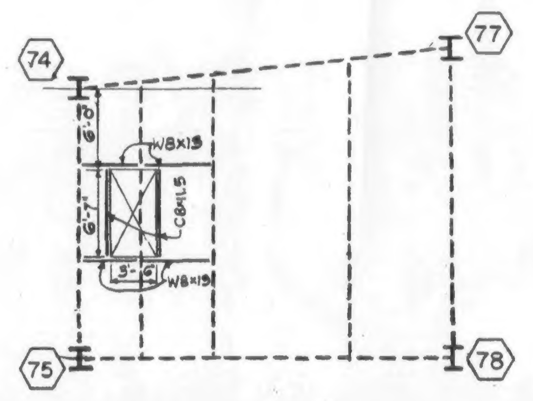
1. FOR NOTES NOT SHOWN SEE DWG. S-2
2. FOR PART PLANS AT 6TH FL. SEE DWG. S-25
3. ADDITIONAL EXIST. BEAM REINF. PLATES NOTED WITH AN ASTERISK * (OCCUR AT 28TH FL. ONLY)
4. -⋇- INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS (----) INDICATING DISTANCE BELOW TOP OF STEEL BEAM.
5. WHERE NOTED PROVIDE 5" ϕ CORE IN SLAB, PLACE ONE STUD PER CORE LOCATION, SPACED WITHIN NEW MECH. ROOM.
6. WHERE NOTED PLACE BEAMS TIGHT TO UNDERSIDE OF DECK AT RIB CLOSEST TO OPENINGS SHIM AT 1/4 POINT AS REQUIRED.



PART PLAN - 29TH TO 34TH FL.



PART PLAN - 6TH FLOOR



PART PLAN - 7TH FLOOR

ATTACHMENT "A"

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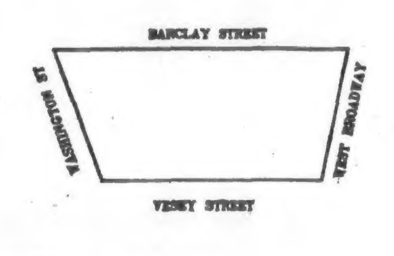

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	8/23/94	ISSUED FOR TENANT ALTERAT.
10	10/4/93	CHILLED WATER LINE RELOCAT.
9	6/2/93	ISSUED FOR ADDENDUM No. 1
8	5-21-93	ISSUED FOR TENNANT ALTERATION
7	7-3-90	ISSUED FOR BULLETIN #103
6	8/15/89	REVISED AS CIRCLED
5	6/6/89	REVISED AS CIRCLED
4	3/1/89	REVISED AS CIRCLED
3	1/20/89	REVISED AS CIRCLED.
	1/9/89	ISSUED FOR CONST
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

SOM

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7TH TO 29TH FLOOR FRAMING PLAN

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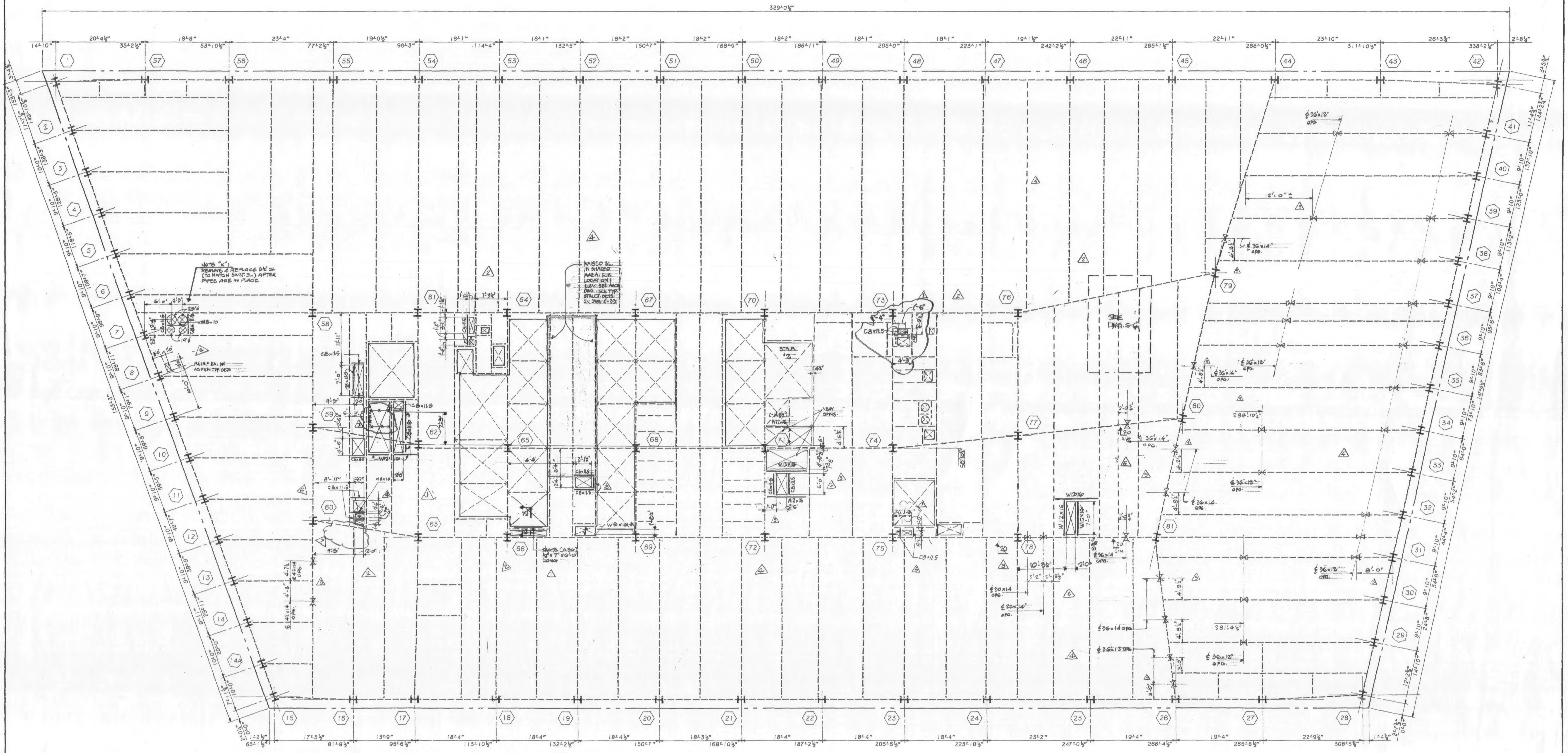

30TH FLOOR FRAMING PLAN

NOTES:
1. FOR NOTES NOT SHOWN SEE DWG. S-2.

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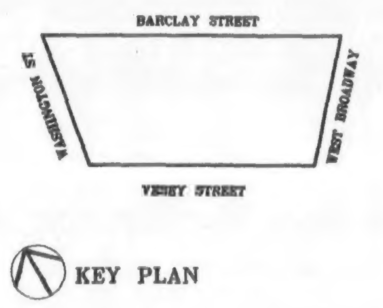

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/13/89	ISSUED FOR CONST.
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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30TH FLOOR FRAMING PLAN

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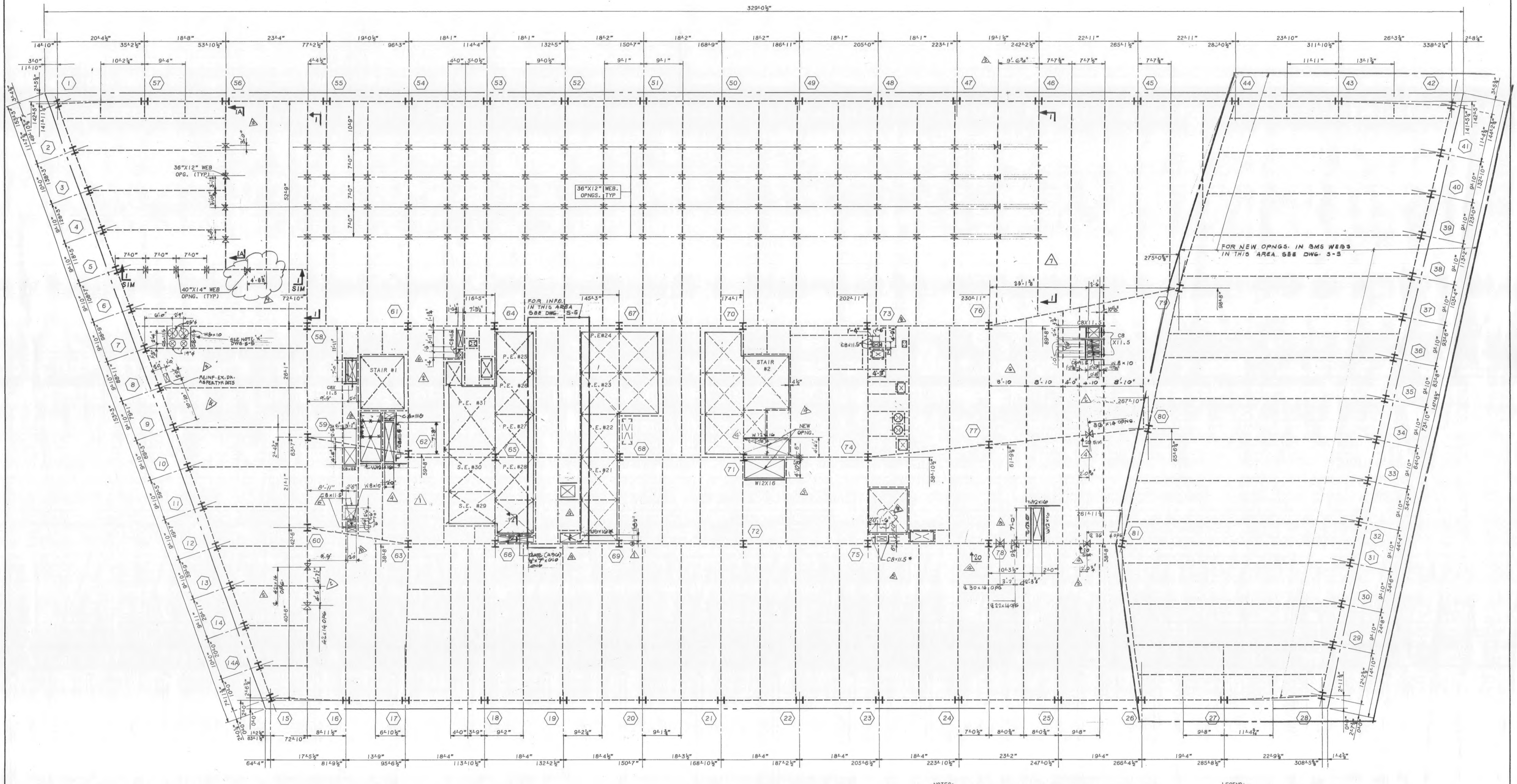

31ST FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —×— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. ---- INDICATES EXISTING STEEL FRAMING.
7. [⊠] INDICATES EXISTING SLAB OPENING.
8. [⊠] INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS --- INDICATING DISTANCE BELOW T/STL. BM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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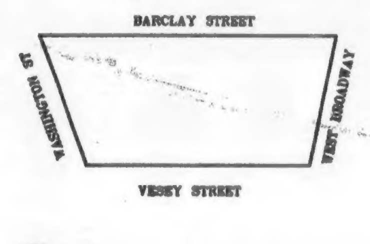

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
9		REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	6/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEVATION
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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31ST. FLOOR FRAMING PLAN

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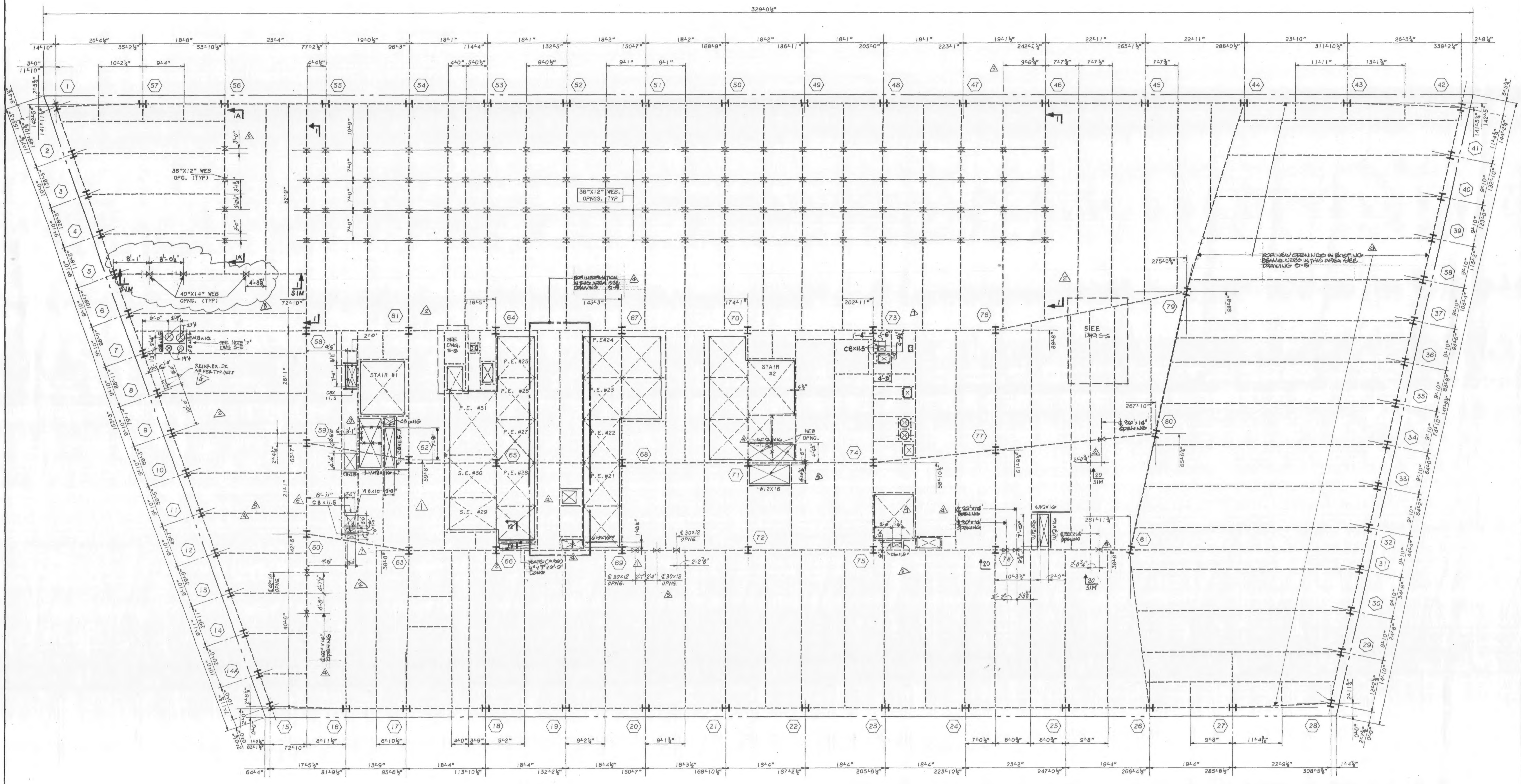

32ND FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. INDICATES NEW STEEL FRAMING.
6. INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ---- FROM TOP OF BEAM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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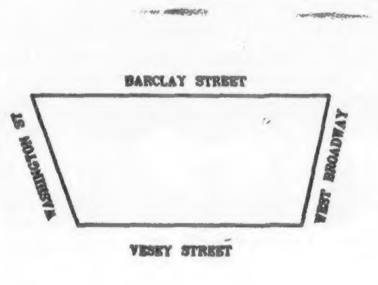

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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32ND. FLOOR FRAMING PLAN

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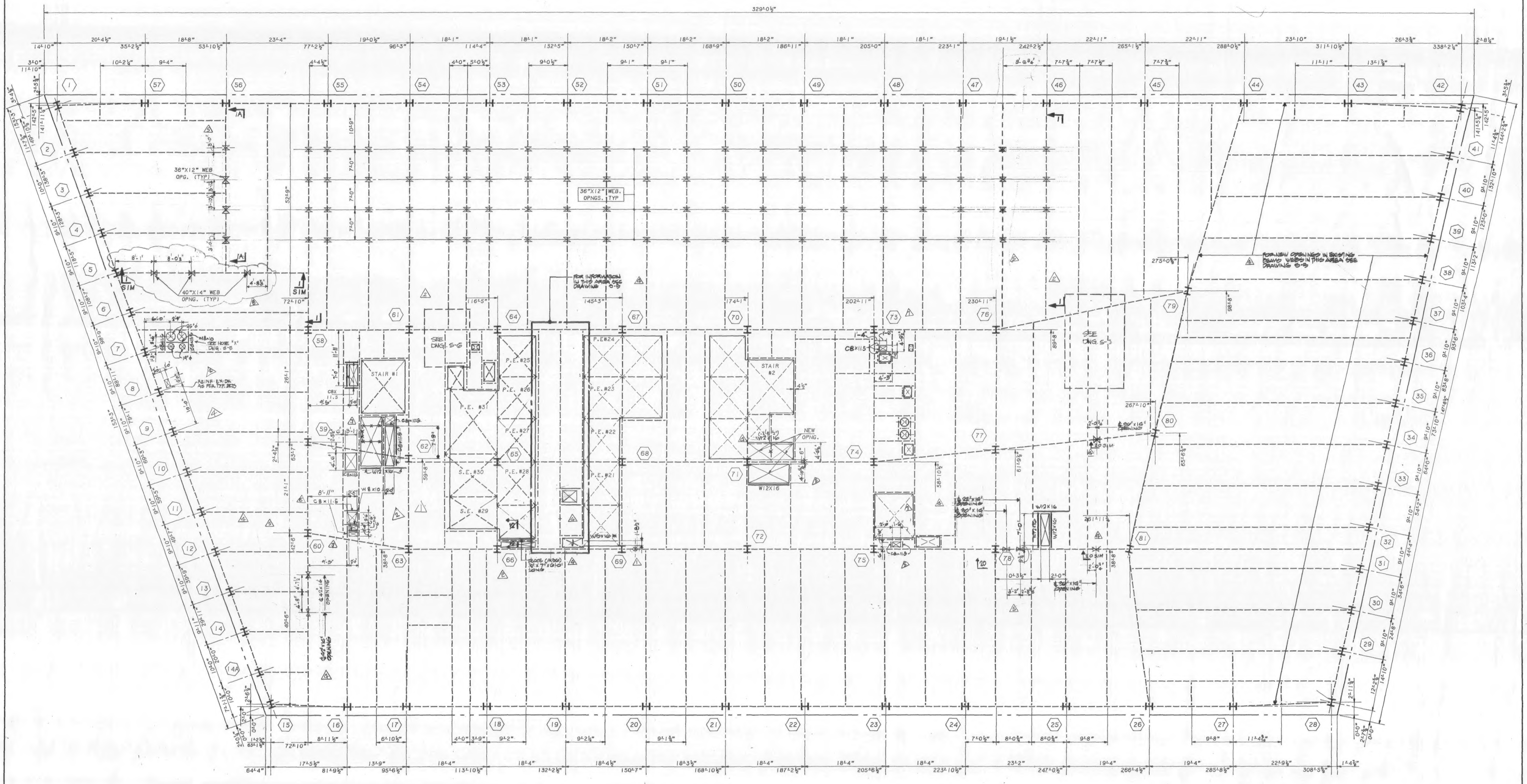

33RD FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. —X— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS -...... FROM TOP OF BEAM
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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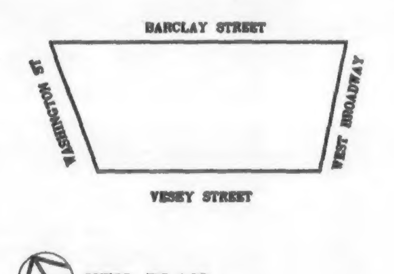

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	6/15/89	REVISED AS CIRCLED
6	4-6-89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATION

SOM

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FLACK AND KURTZ
Mechanical / Electrical Engineers
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IRWIN G. CANTOR P.C.
Structural Engineers
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MEMBER: THE CANTOR/SEINUK GROUP

33RD FLOOR FRAMING PLAN

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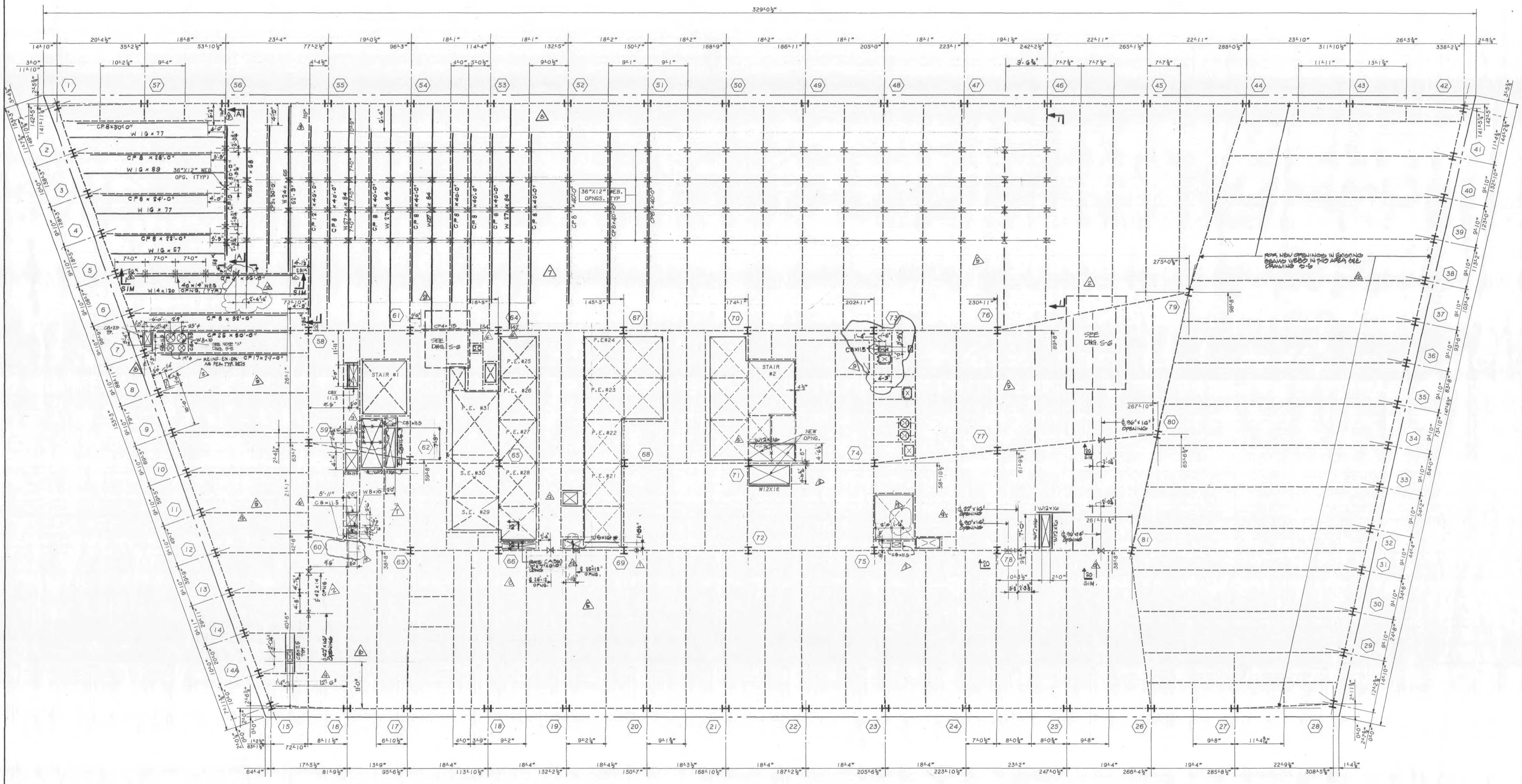

34TH FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟵ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. – – – – INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. —⧖— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS – --- INDICATING DISTANCE BELOW T/STL. BM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
12. △C INDICATES TYPE OF REINFORCED EXIST. CONNECTIONS, SEE TYP. DET. DWG S-33.

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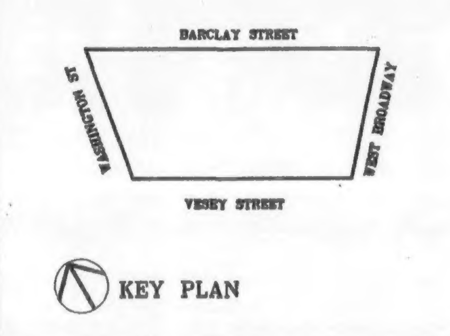

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10		REVISED AS CIRCLED
9	8/15/89	REVISED AS CIRCLED
8	8-10-89	ISSUED FOR FIELD SKETCH
7	5-22-89	REVISED AS CIRCLED
6	4-6-89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REV. AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

SOM

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34 TH FLOOR FRAMING PLAN

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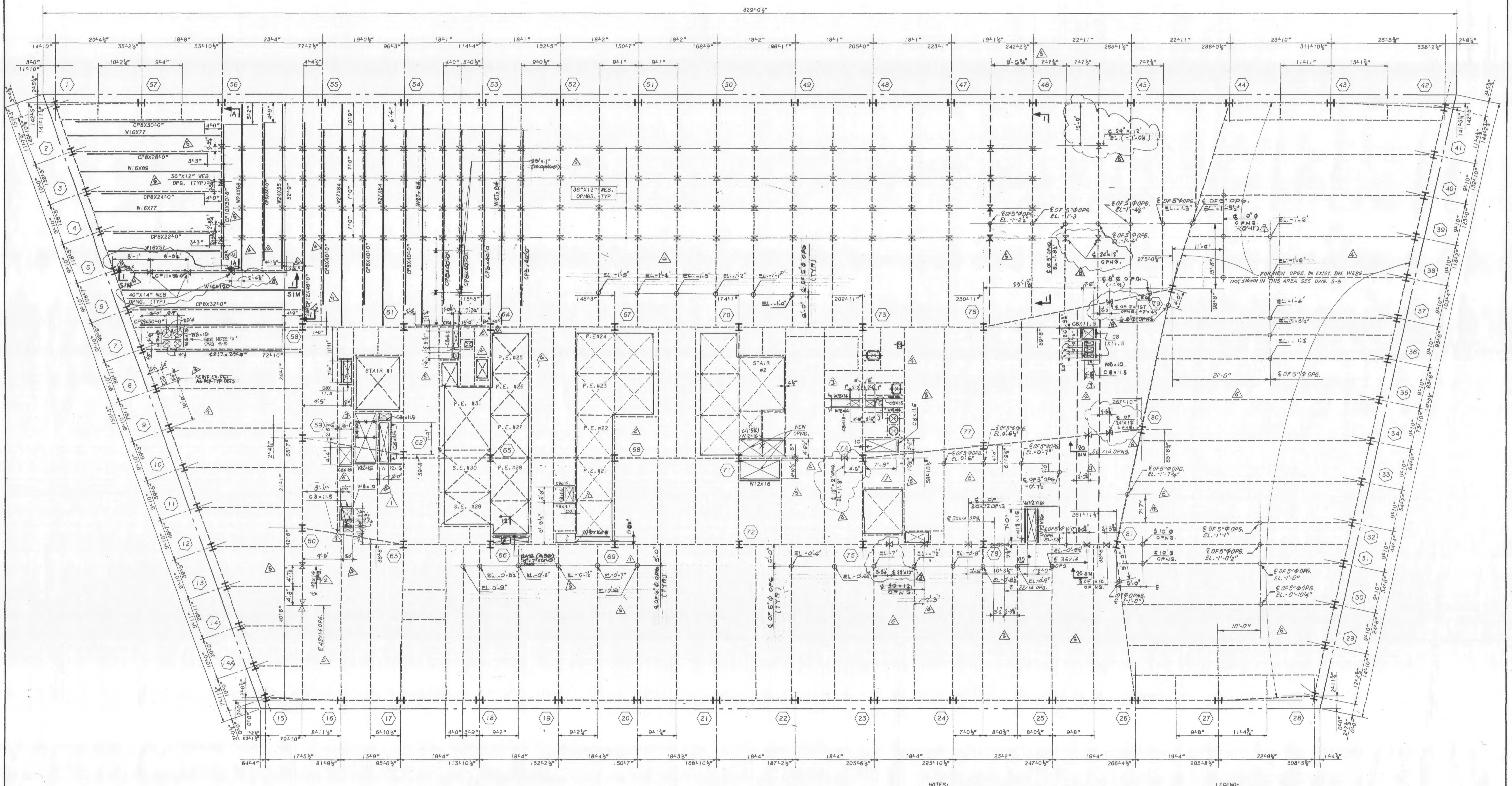

35TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ALL PLUMBING ¢ EL'S TO BE VERIFIED WITH PLUMBING SHOP DWGS BEFORE PROCEEDING WITH WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ¢ OF PENETRATION SHALL BE AT ¢ OF BEAM U.O.N. THUS ±--- FROM TOP OF STEEL BEAM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
12. △ INDICATES TYPE OF EXIST. CONNECTION REINF. DETAIL SEE DETAIL ON DWG. S-33

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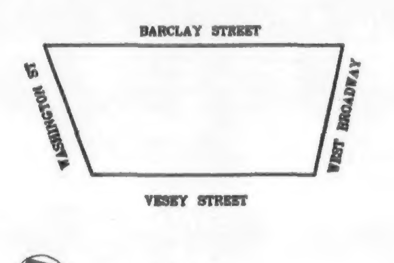

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REV. AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

SOM

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35TH FLOOR FRAMING PLAN

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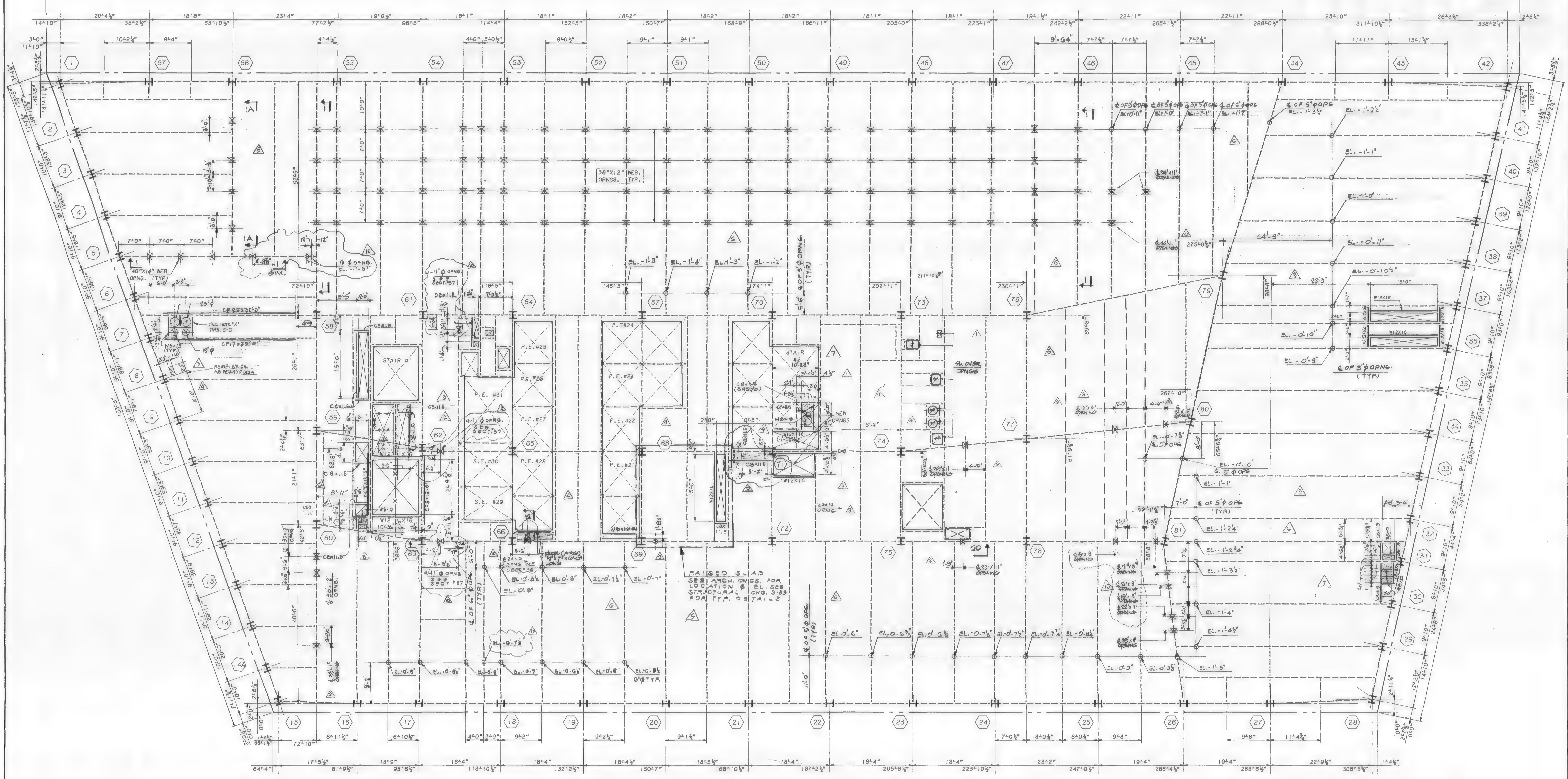

36TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ALL PLUMBING & EL's TO BE VERIFIED WITH PLUMBING SHOP DWGS. BEFORE PROCEEDING WITH WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. (arrow) INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. – – – INDICATES EXISTING STEEL FRAMING.
7. (symbol) INDICATES EXISTING SLAB OPENING.
8. (symbol) INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. —X— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ±··· INDICATING DISTANCE BELOW T/STL. BM.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33

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KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10	7-3-90	ISSUED FOR BULLETIN #103
9	8/24/89	ISSUED FOR FIELD SKETCH
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/16/88	REVISED AS CIRCLED FOR SHUTTLE ELEVATION
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10/31/88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG. MODIFICATIONS.

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36TH FLOOR FRAMING PLAN

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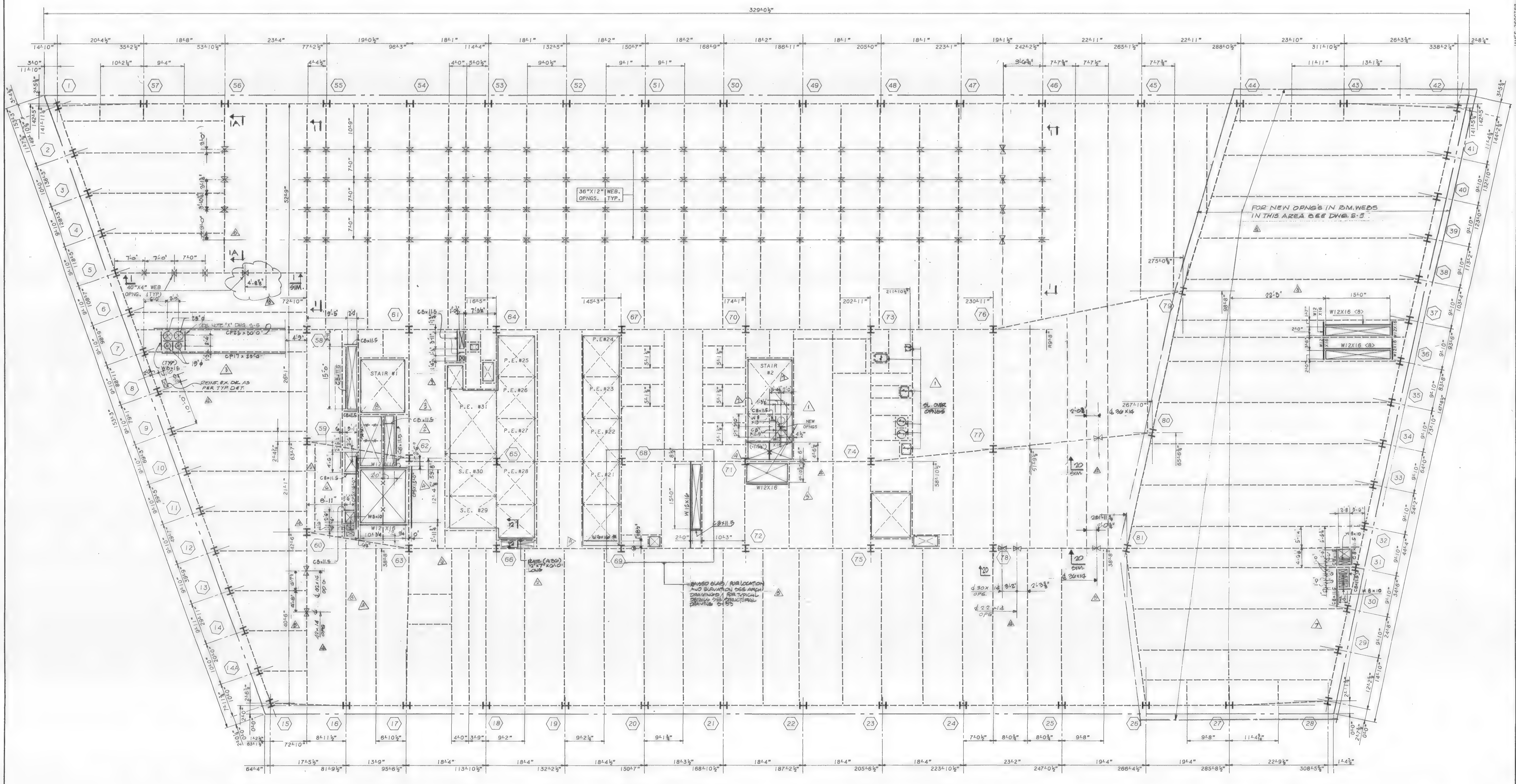

37TH FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. – – – INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS —.... FROM TOP OF BEAM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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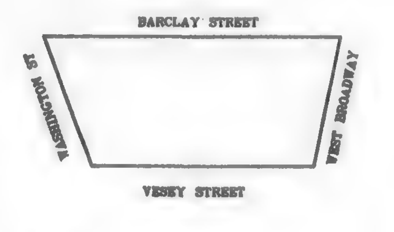

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
9		REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REVISED AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10/31/88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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37TH FLOOR FRAMING PLAN

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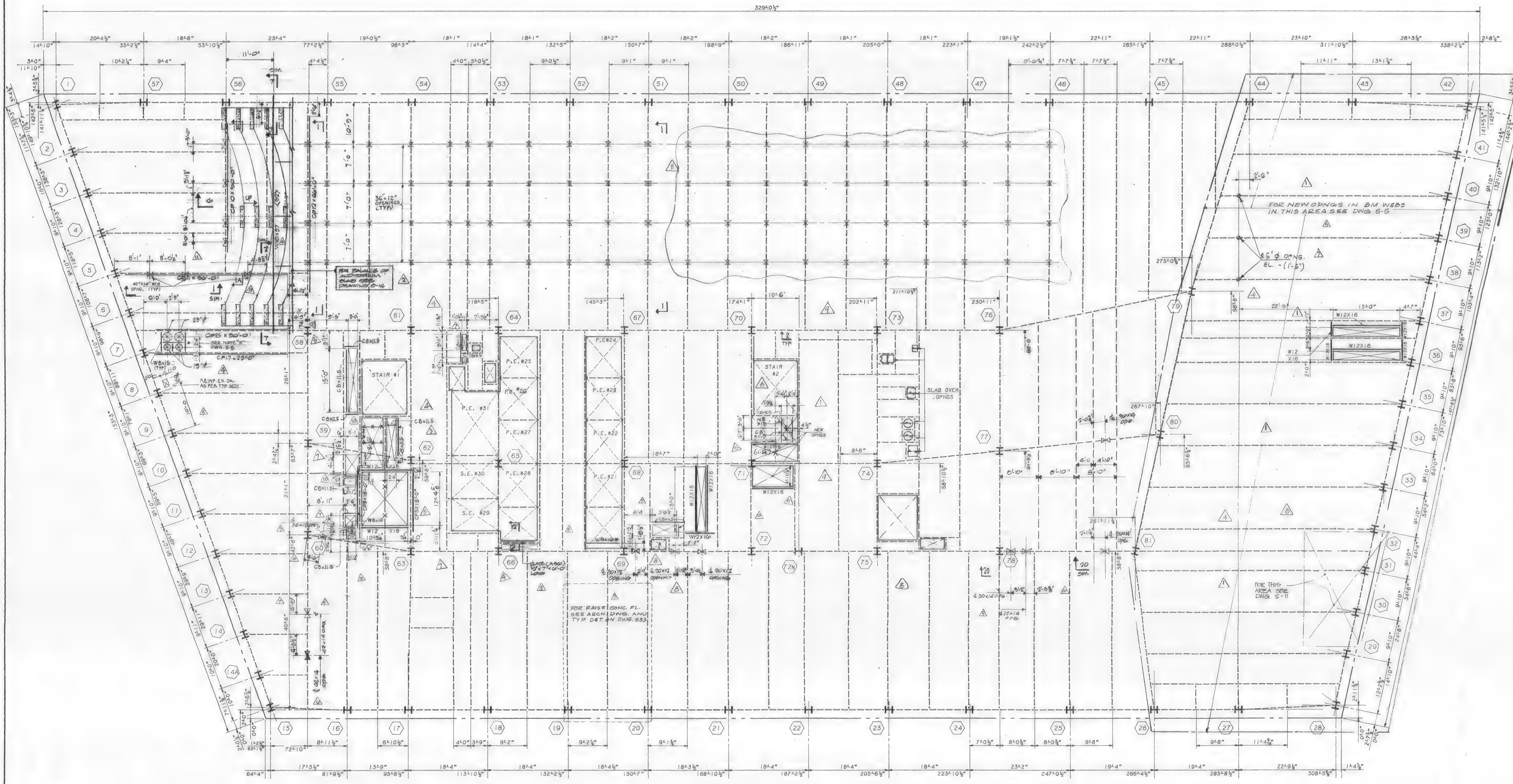

38TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. INDICATES NEW STEEL FRAMING.
6. ------ INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN. TO BE W8 × 28 U.O.N.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS --- INDICATING DISTANCE BELOW T/STL BM.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. (C) INDICATES TYPE OF EXIST. CONNECTION REINF. DETAIL. SEE DETAIL ON DWG. S-33

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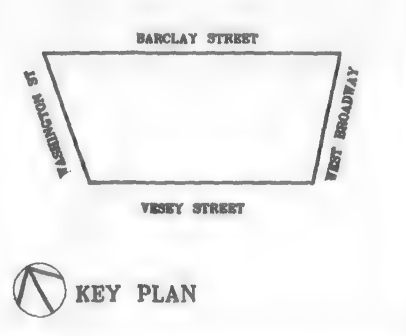

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	11/30/89	BULLETIN #15
10	8/15/89	REVISED AS CIRCLED
9	6/12/89	REVISED AS CIRCLED
8	6/22/89	REVISED AS CIRCLED
7	4/6/89	REVISED AS CIRCLED
6	3/1/89	REVISED AS CIRCLED
5	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
4	12/22/88	REV. AS CIRCLED
3	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
2	11/21/88	REVISION TO 11/7/88 SUBMISSION
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10/31/88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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38TH FLOOR FRAMING PLAN

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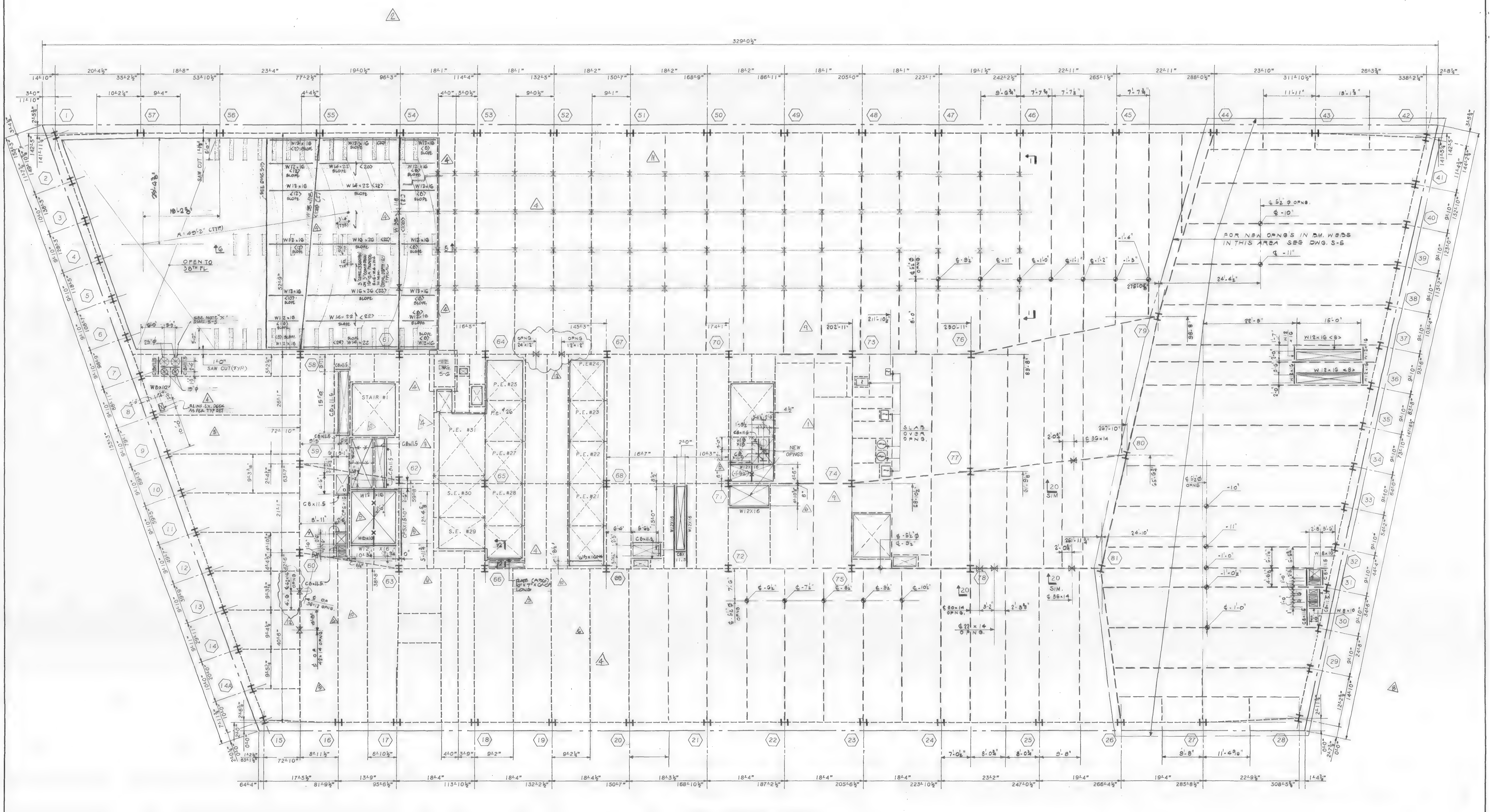

39TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. CONTRACTOR TO SUBMIT DETAIL FOR SUPPORT OF EXIST. PIPES IN OPEN AREA FOR ENGINEERS REVIEW AND APPROVAL.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. INDICATES NEW STEEL FRAMING.
6. ---- INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN. TO BE W8x20 U.O.N.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33

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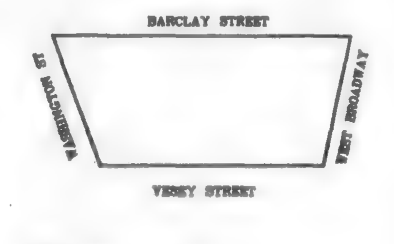

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
12	4/24/90	ISSUED FOR BULLETIN #79
11	11/30/89	BULLETIN #15
10	8/15/89	REVISED AS CIRCLED
9	6/12/89	REVISED AS CIRCLED
8	5/22/89	REVISED AS CIRCLED
7	4/6/89	REVISED AS CIRCLED
6	3/1/89	REVISED AS CIRCLED
5	1/20/89	REV. AS CIRCLED
	1/3/89	ISSUED FOR CONST.
4	12/22/88	REV. AS CIRCLED
3	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
2	11/21/88	REVISION TO 11/7/88 SUBMISSION
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10-31-88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

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39TH FLOOR FRAMING PLAN

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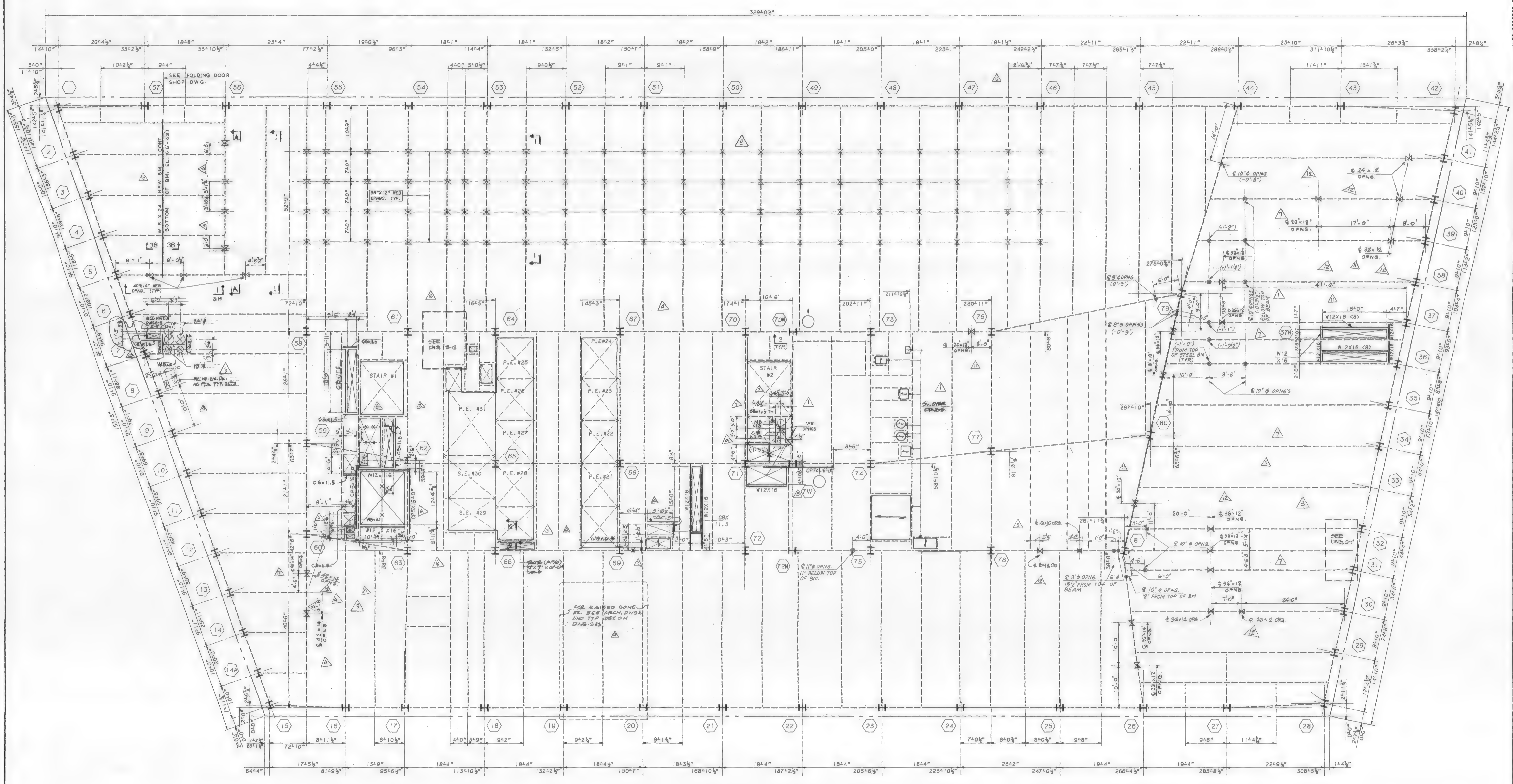


40TH FLOOR FRAMING PLAN

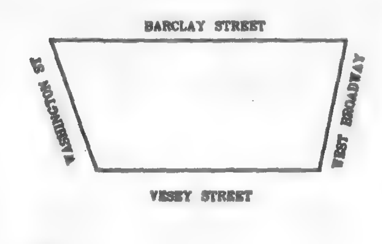
NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ☒ INDICATES EXISTING SLAB OPENING.
8. ☒ INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN. TO BE W8x28 U.O.N.
10. —⧖— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

STATE OF NEW YORK — IRWIN G. CANTOR No. 32548 — LICENSED PROFESSIONAL ENGINEERS

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048



KEY PLAN

NOTES

LEGEND

No.	Date	Revision
13	7/3/90	ISSUED FOR BULLETIN #103
12	5/10/90	ISSUED FOR BULLETIN #84
11	4/24/90	ISSUED FOR BULLETIN #79
10	3/30/90	REVISED AS CIRCLED
9	11/30/89	BULLETIN #15
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10-31-88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

SOM
SKIDMORE, OWINGS & MERRILL
ARCHITECTS / ENGINEERS
220 East 42nd St., New York, N.Y. 10017

FLACK AND KURTZ
Mechanical / Electrical Engineers
475 Fifth Avenue, New York, N.Y. 10016

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MEMBER: THE CANTOR/SEINUK GROUP

40TH FLOOR FRAMING PLAN

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Project No.:
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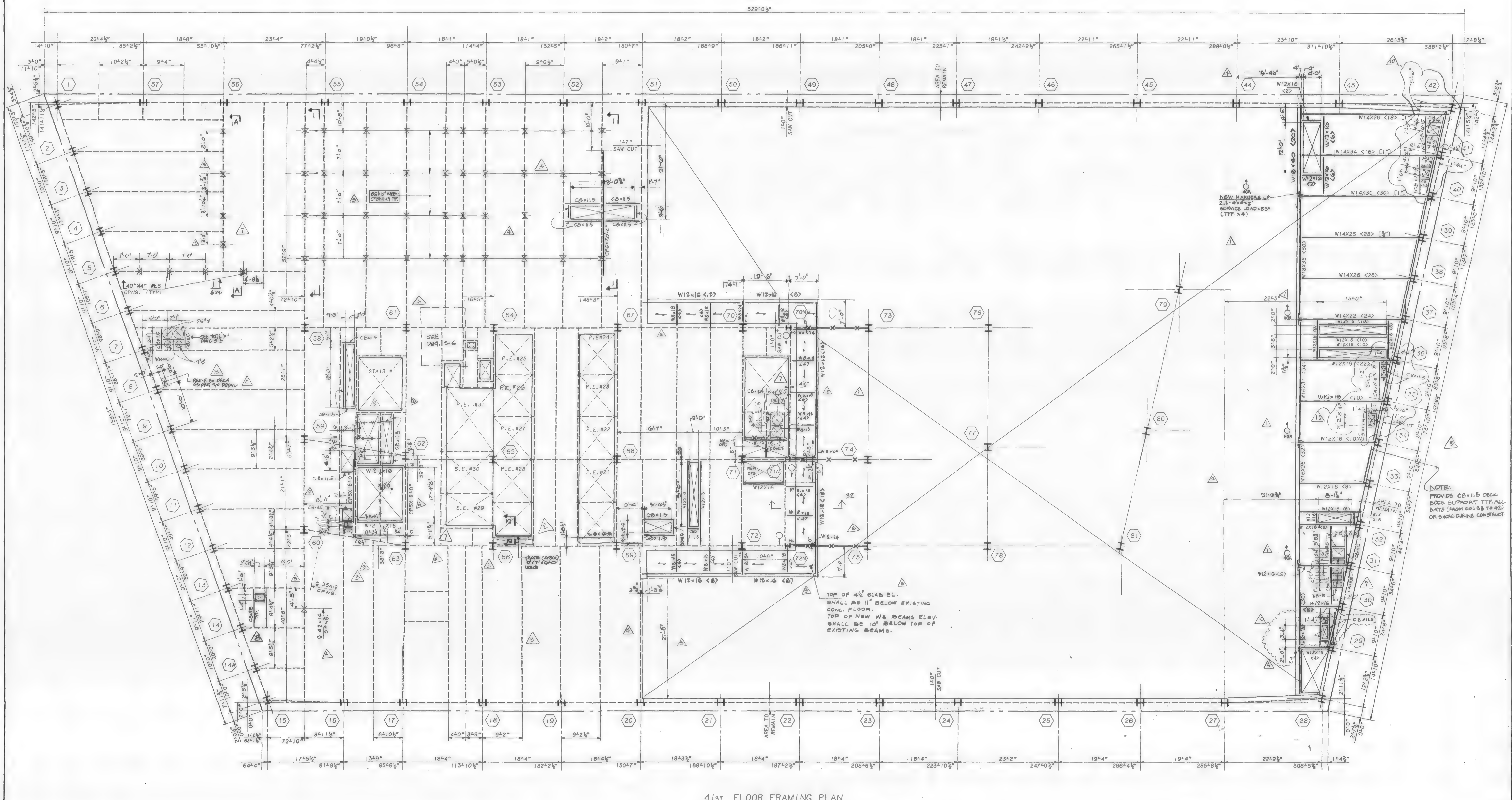
Scale:
Sheet No. S-15

E0057 S-15



41st FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. CONTRACTOR TO SUBMIT DETAIL FOR SUPPORT OF EXIST. PIPES IN OPEN AREA FOR ENGINEERS REVIEW AND APPROVAL.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. (arrow) INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. (symbol) INDICATES EXISTING SLAB OPENING.
8. (symbol) INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMNS TO BE W8x28 U.O.N.
10. (symbol) INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. M.C. INDICATES MOMENT CONNECTION (FULL CAPACITY).

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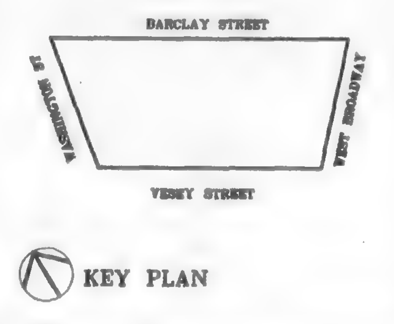

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10	1/29/90	ISSUED FOR BULLETIN NO. 45
9	8/15/89	REVISED AS CIRCLED
8	6/10/89	ISSUED FOR FIELD SKETCH
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11-7-88	REVISION TO 10/31/88 SUBMISSION
	10-31-88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

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41st FLOOR FRAMING PLAN

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Sheet No. S-16

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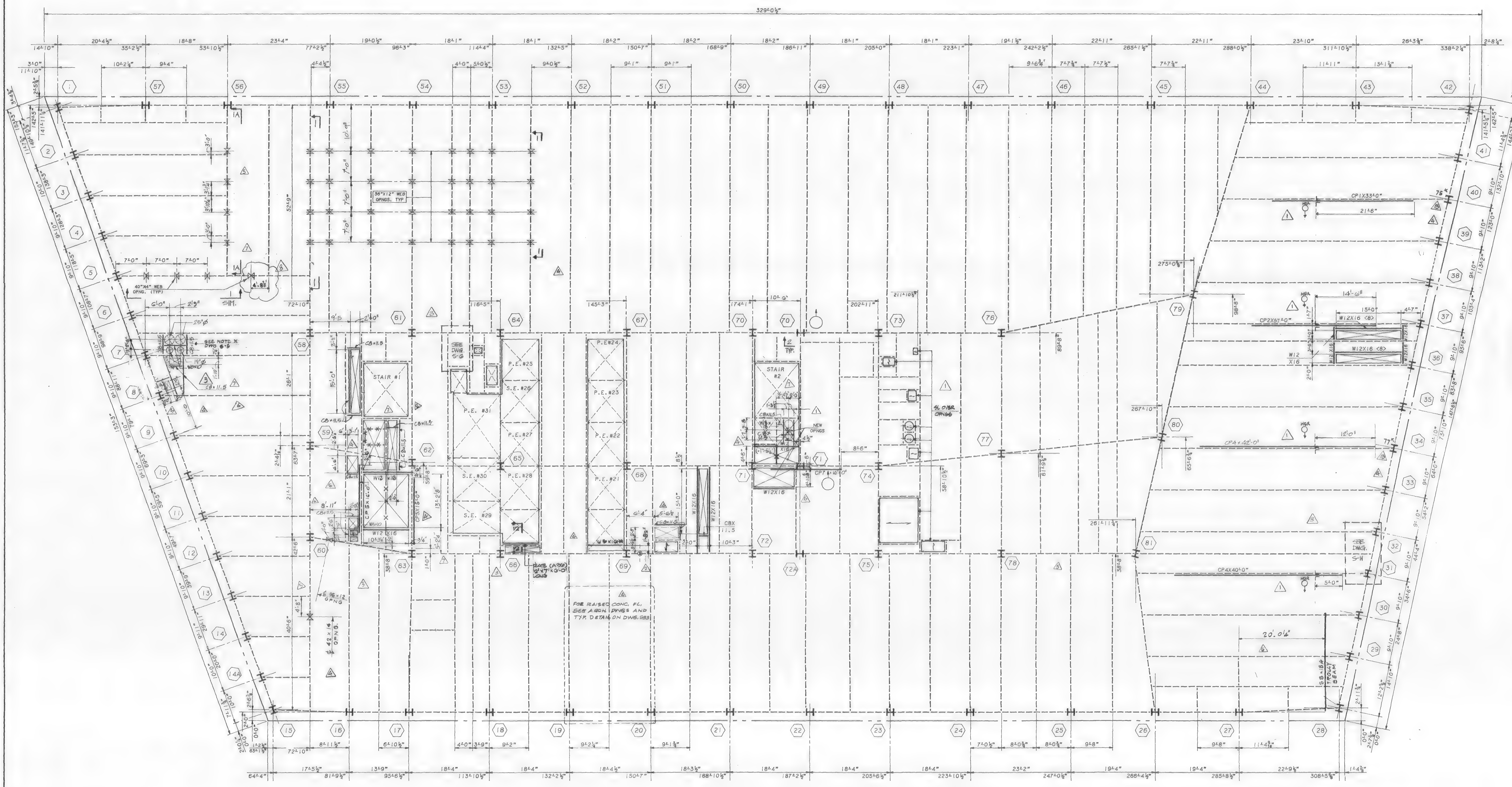

42ND FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ☒ INDICATES EXISTING SLAB OPENING.
8. ☒ INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMNS W8×28 U.O.N.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS-.... FROM TOP OF BEAM 7
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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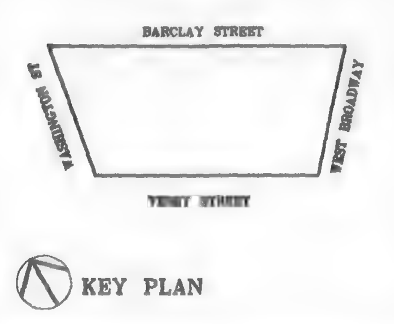

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	OCT. 31 88	ISSUED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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42ND FLOOR FRAMING PLAN

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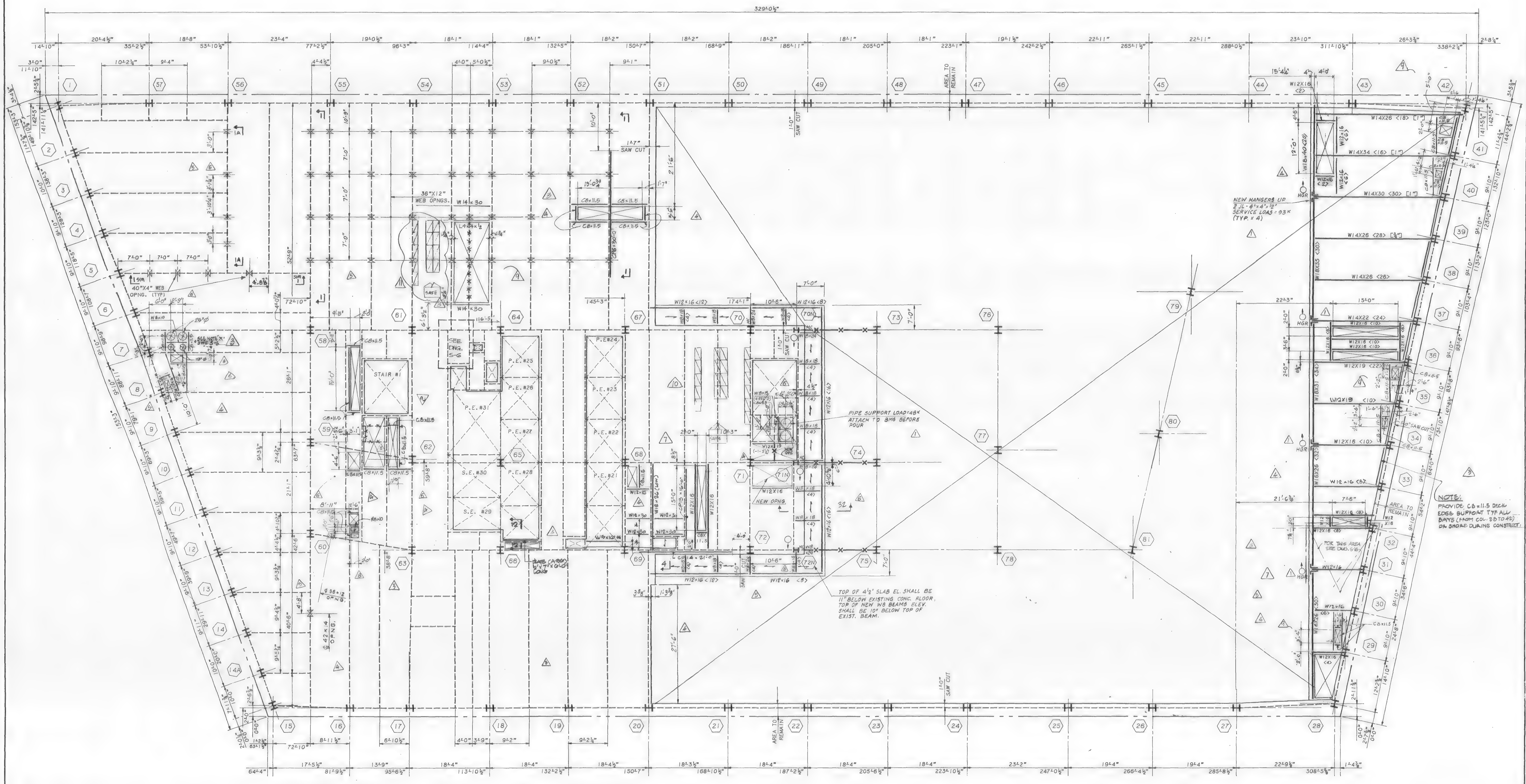

43RD FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. CONTRACTOR TO SUBMIT DETAIL FOR SUPPORT OF EXIST. PIPES IN OPEN AREA FOR ENGINEERS REVIEW AND APPROVAL.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟵⟶ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING & BALCONIES (5)
4. —×— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. ⟨..N⟩ INDICATES NEW POST OR COLUMNS TO BE W8x28 U.O.N.
10. —⊠— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. ✳ INDICATES CO-ORDINATE LOCATION OF BEAM WITH ELEVATOR SHOP DWGS.

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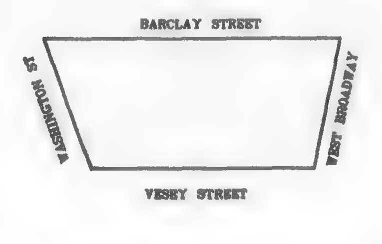

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	7/22/94	REVISED AS NOTED
10	5/25/94	REVISED AS CIRCLED
9	8/26/90	ISSUED FOR BULLETIN NO. 45
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	NOV. 7, 88	REVISION TO 10/01/88 SUBMISSION
	OCT 31, 88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATION

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43RD FLOOR
FRAMING PLAN

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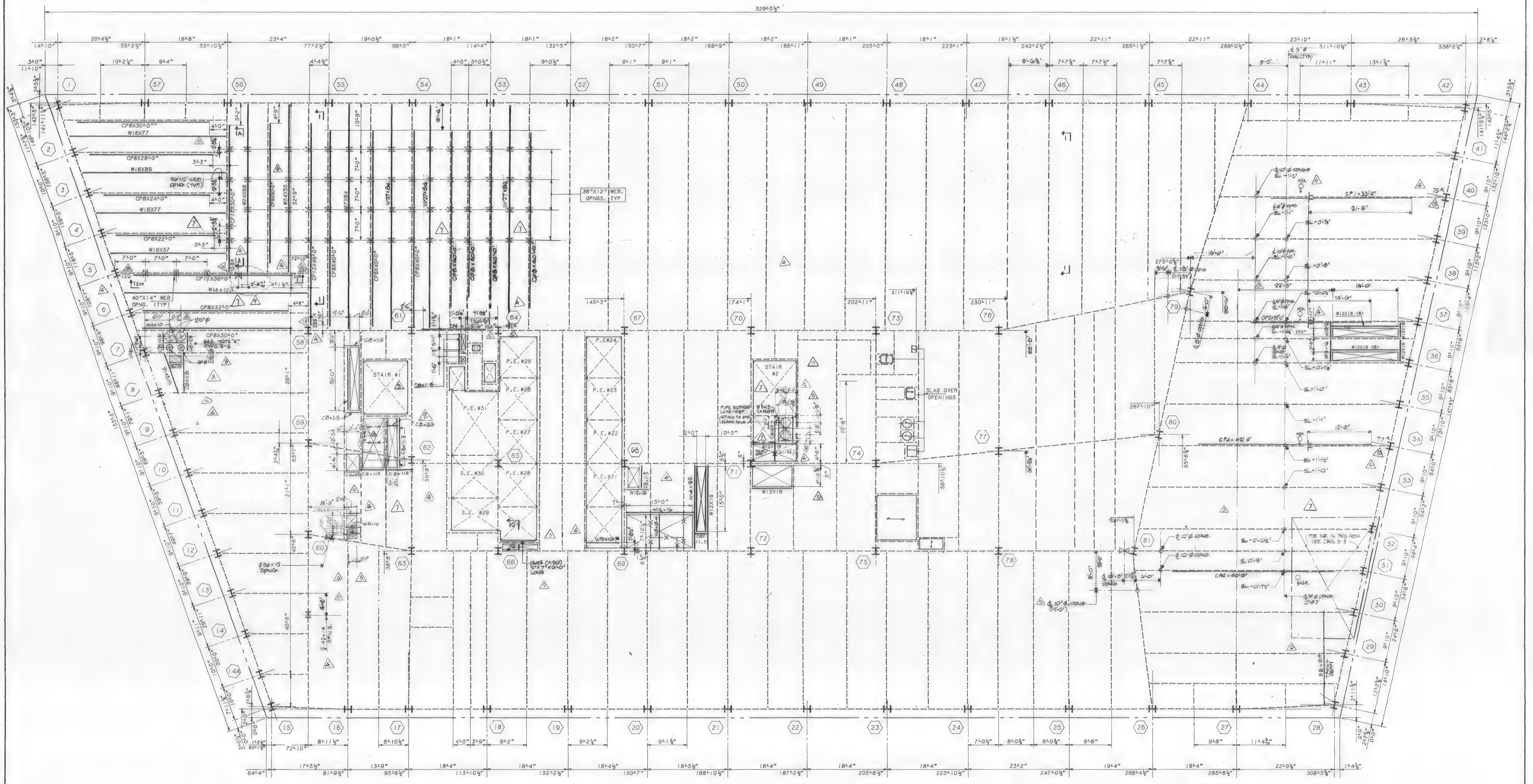

44TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ALL PLUMBING & EL'S TO BE VERIFIED WITH PLUMBING SHOP DWGS. BEFORE PROCEEDING WITH WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ± ... FROM TOP OF STEEL BEAM
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. (A) INDICATES TYPE OF EXISTING CONNECTION REINF. DETAIL, SEE DETAIL ON DWG. S-33

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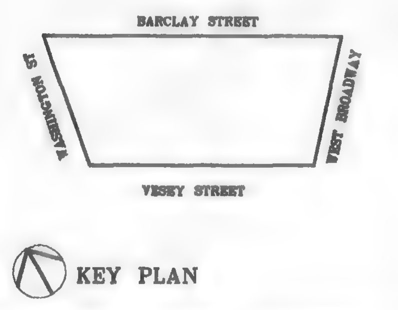

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
9	10/10/89	REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REVISED AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	NOV. 7, 88	REVISION TO 10/31/88 SUBMISSION
	OCT. 31, 88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATION

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44TH FLOOR FRAMING PLAN

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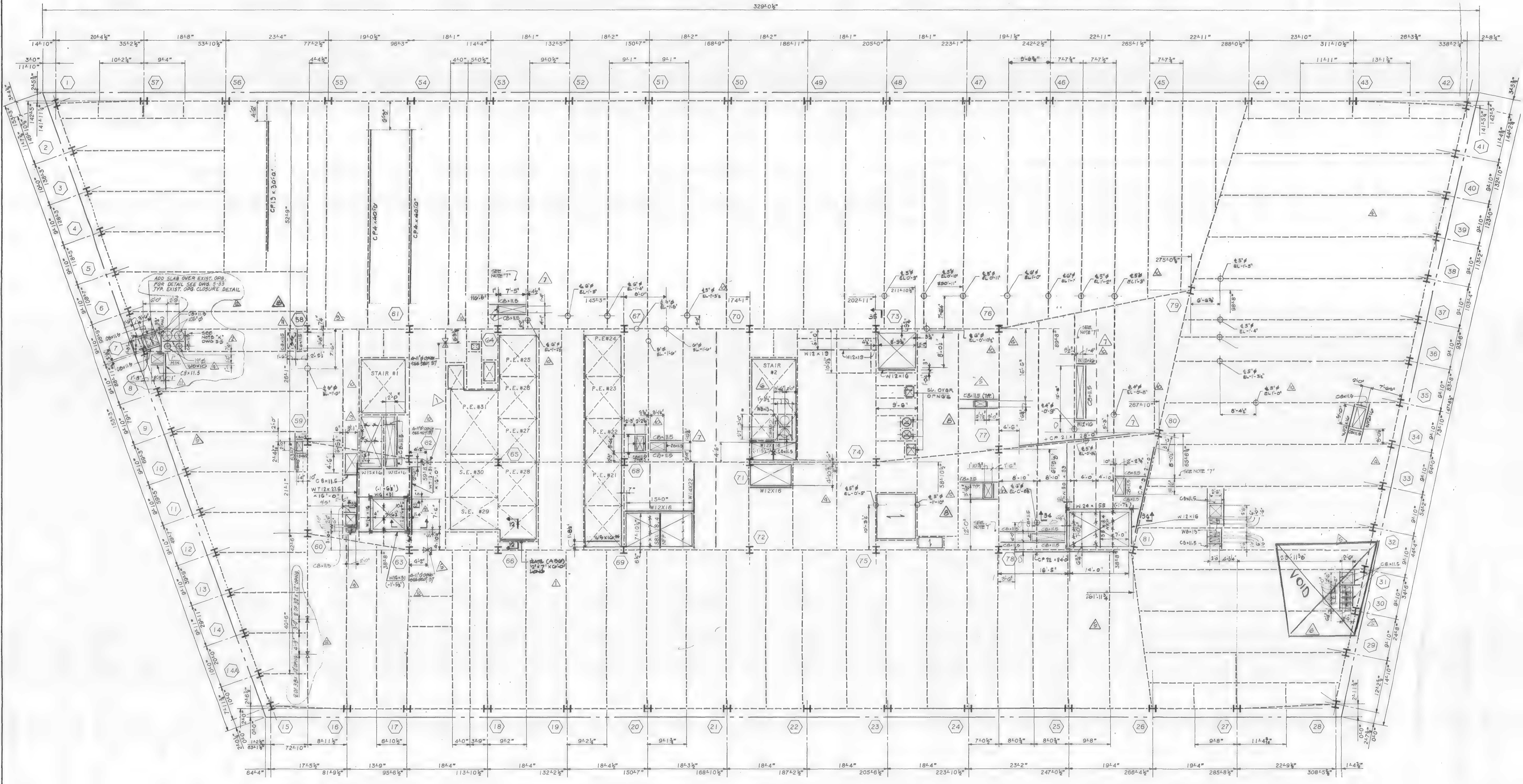
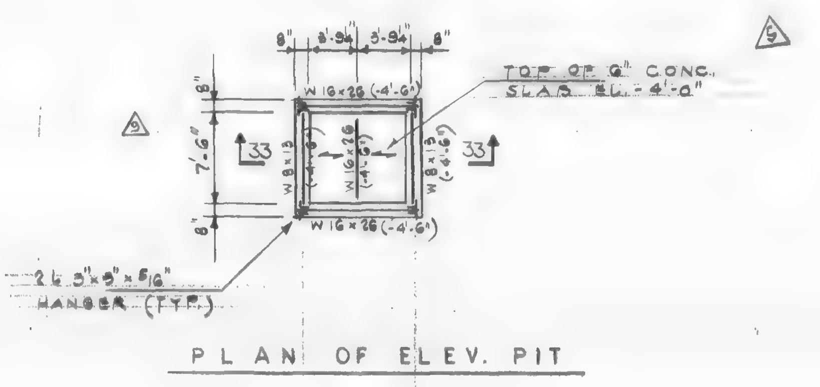


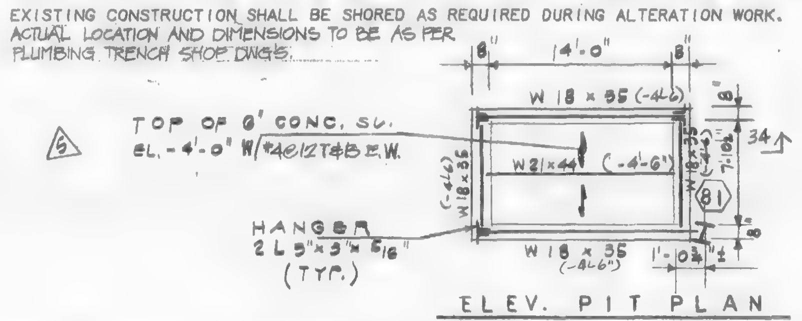
45TH FLOOR FRAMING PLAN



PLAN OF ELEV. PIT

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ACTUAL LOCATION AND DIMENSIONS TO BE AS PER PLUMBING TRENCH SHOP DWGS.



ELEV. PIT PLAN

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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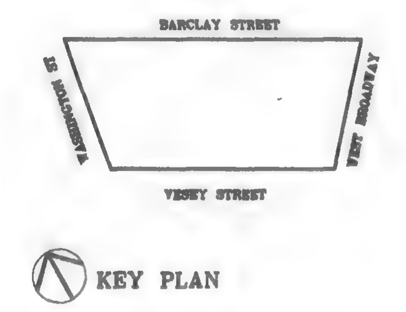

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
12		
11	1/26/90	ISSUED FOR BULLETIN NO. 45
10	10/ /89	REVISED AS CIRCLED
9	8/15/89	REVISED AS CIRCLED
8	8/10/89	ISSUED FOR FIELD SKETCH
7	6/12/89	REVISED AS CIRCLED
6	5/22/89	REVISED AS CIRCLED
5	4/6/89	REVISED AS CIRCLED
4	3/1/89	REVISED AS CIRCLED
3	1/26/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
2	12/22/88	REV. AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	11/21/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

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45TH FLOOR FRAMING PLAN

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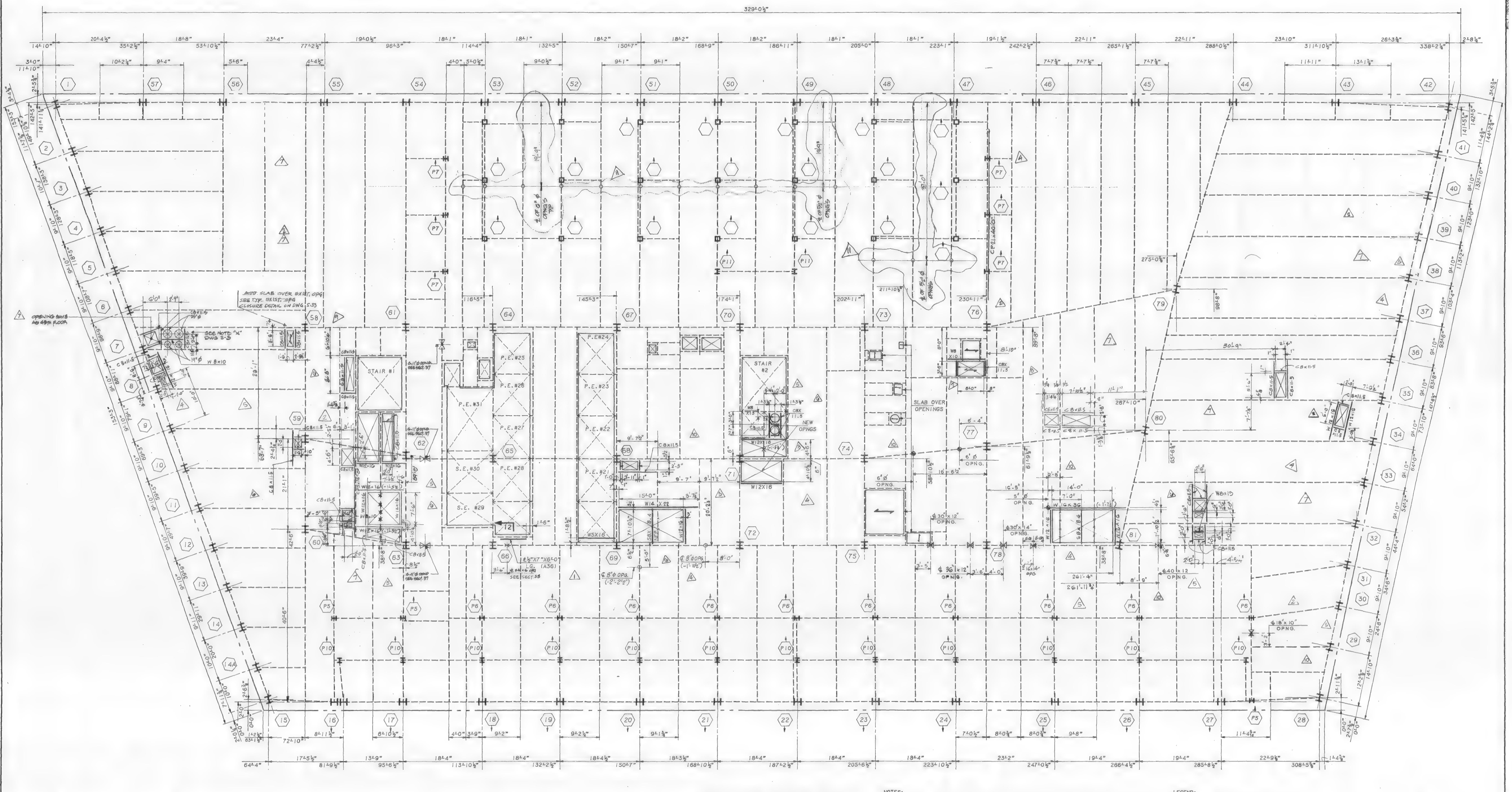

46TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWGS S-32, S-33
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —x— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. ⬡ INDICATES NEW POST OR COLUMN.
10. —⊠— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33

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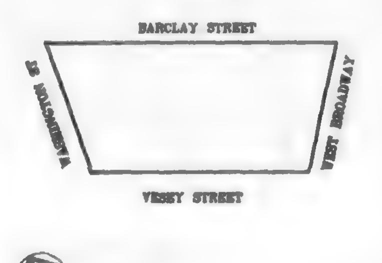

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11		
10	7-3-90	ISSUED FOR BULLENTIN #103
9	4-30-90	COORD FOR FLRS 46 & 47
8	2-23-90	ISSUED FOR BULLETIN NO. 65
7	1/26/90	ISSUED FOR BULLETIN NO 45
6	8/15/89	REVISED AS CIRCLED
5	4-6-89	REVISED AS CIRCLED
4	3-1-89	REVISED AS CIRCLED
3	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST
2	12/22/88	REV. AS CIRCLED
1	12/19/88	REV. AS CIRCLED FOR SHUTTLE ELEV.
	11/21/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE MODIFICATIONS

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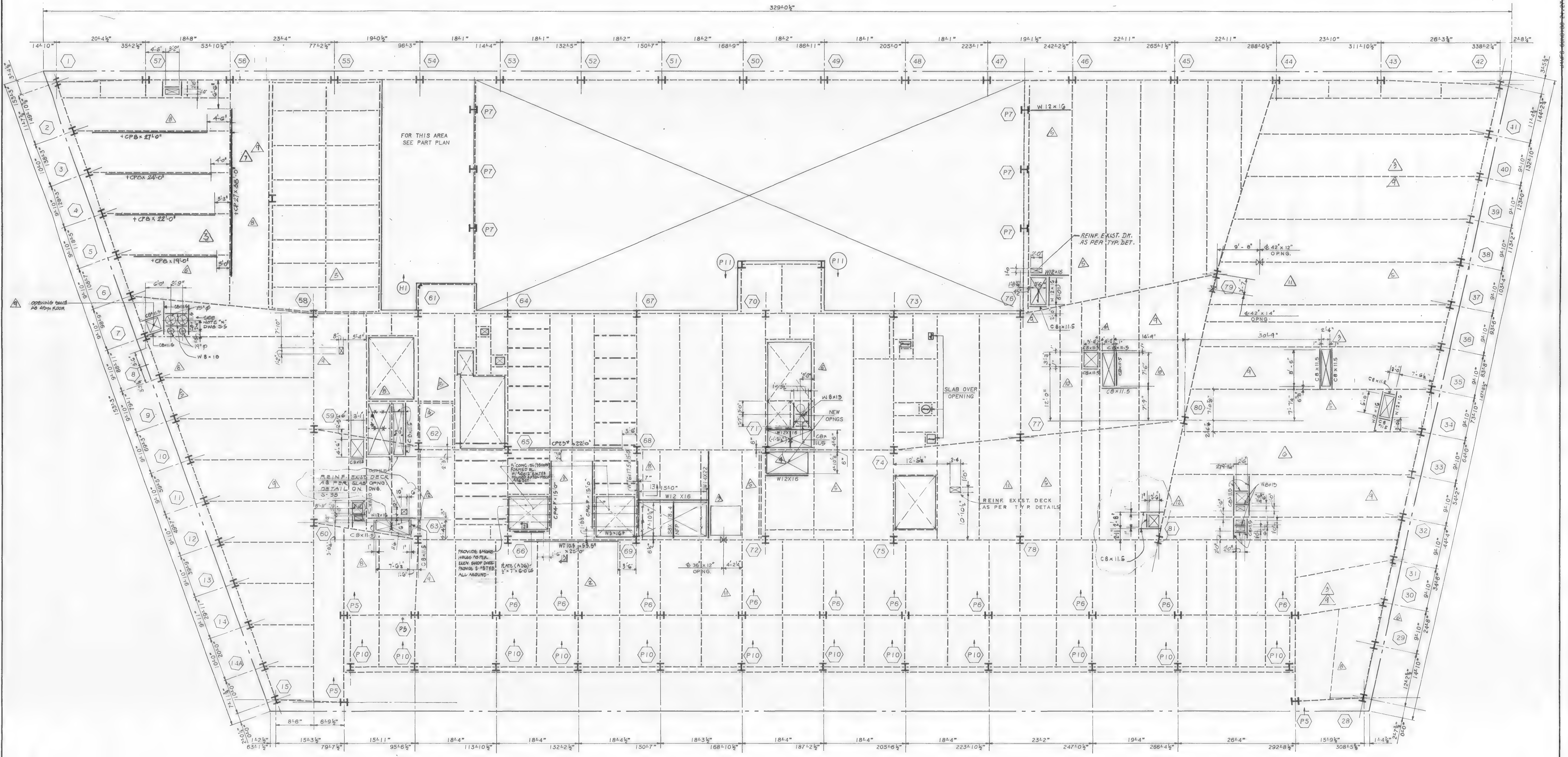
Sheet No. S-21

#88057 / 2021



47TH FLOOR FRAMING PLAN

NOTE:
FOR NOTES SEE DWG. S-21

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
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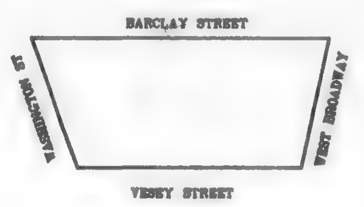

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
12	8-17-90	ISSUED FOR BULLETIN #116
11	7-3-[illegible]	ISSUED FOR BULLETIN #103
10	2-23-90	ISSUED FOR BULLETIN NO. 65
9	1-26-90	ISSUED FOR BULLETIN NO. 45
8	8-15-89	REVISED AS CIRCLED
7	5-26-89	REVISED AS CIRCLED
6	4-6-89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST
3	12/22/88	REV AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11/21/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

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47TH FLOOR FRAMING PLAN

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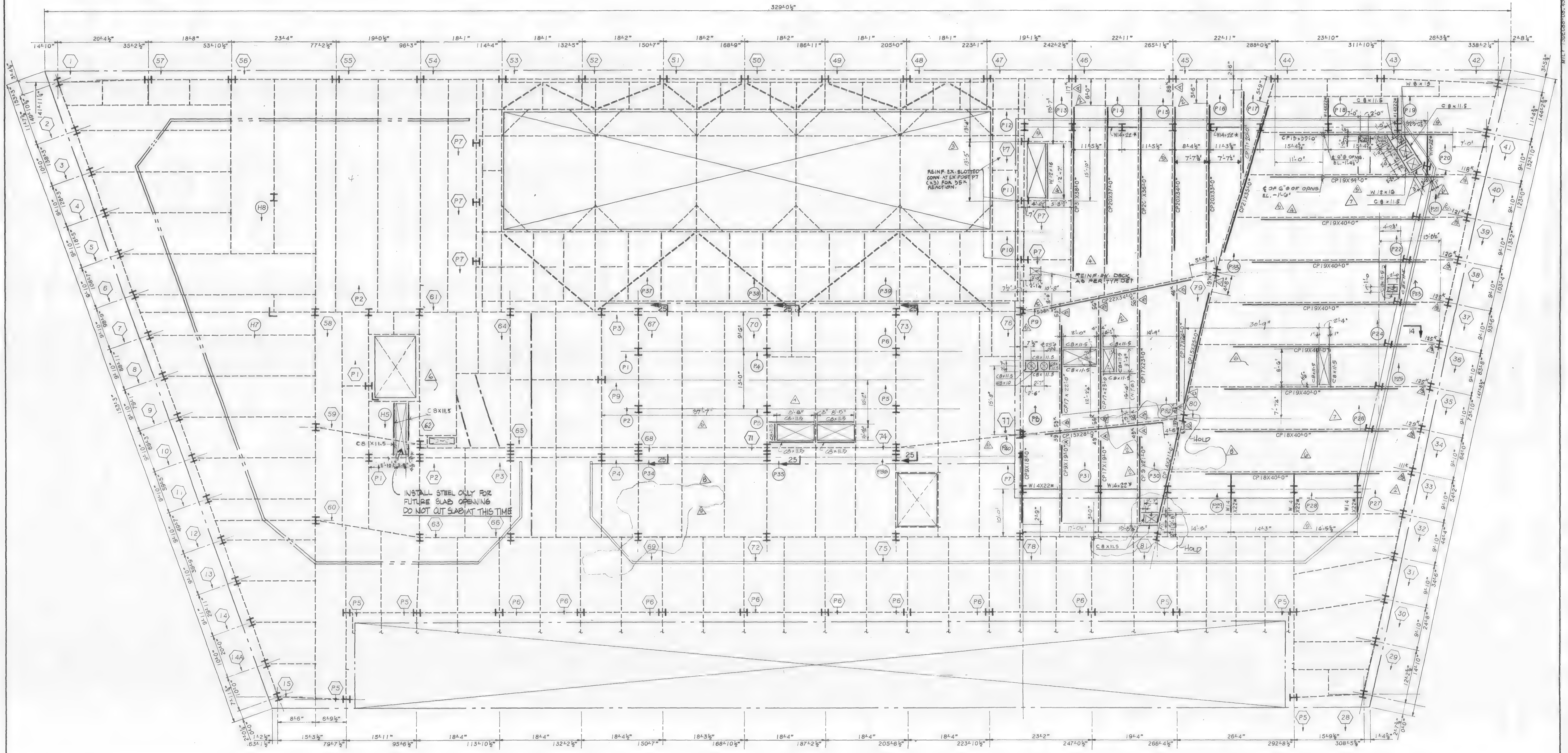
Project No.:
Sheet No.
Date:
Scale:

S-22



ROOF FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N.
   THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWGS. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERFIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. --- INDICATES EXISTING STEEL FRAMING.
2. INDICATES NEW POST GOING UP FROM THIS LEVEL.
3. C.P. INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
4. △ INDICATES TYPE OF EXIST. CONNECTION REINF. DETAIL. SEE DETAIL ON DWG. S-33

△2

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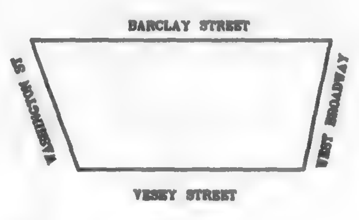

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
9	9-18-90	ISSUED FOR BULLETIN #120
8	8-17-90	ISSUED FOR BULLETIN #110
7	7/3/90	ISSUED FOR BULLETIN #103
6	1/26/90	ISSUED FOR BULLETIN 45
5	8/15/89	REVISED AS CIRCLED
4	4/6/89	REVISED AS CIRCLED
3	3/1/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO PA FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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ROOF FRAMING PLAN

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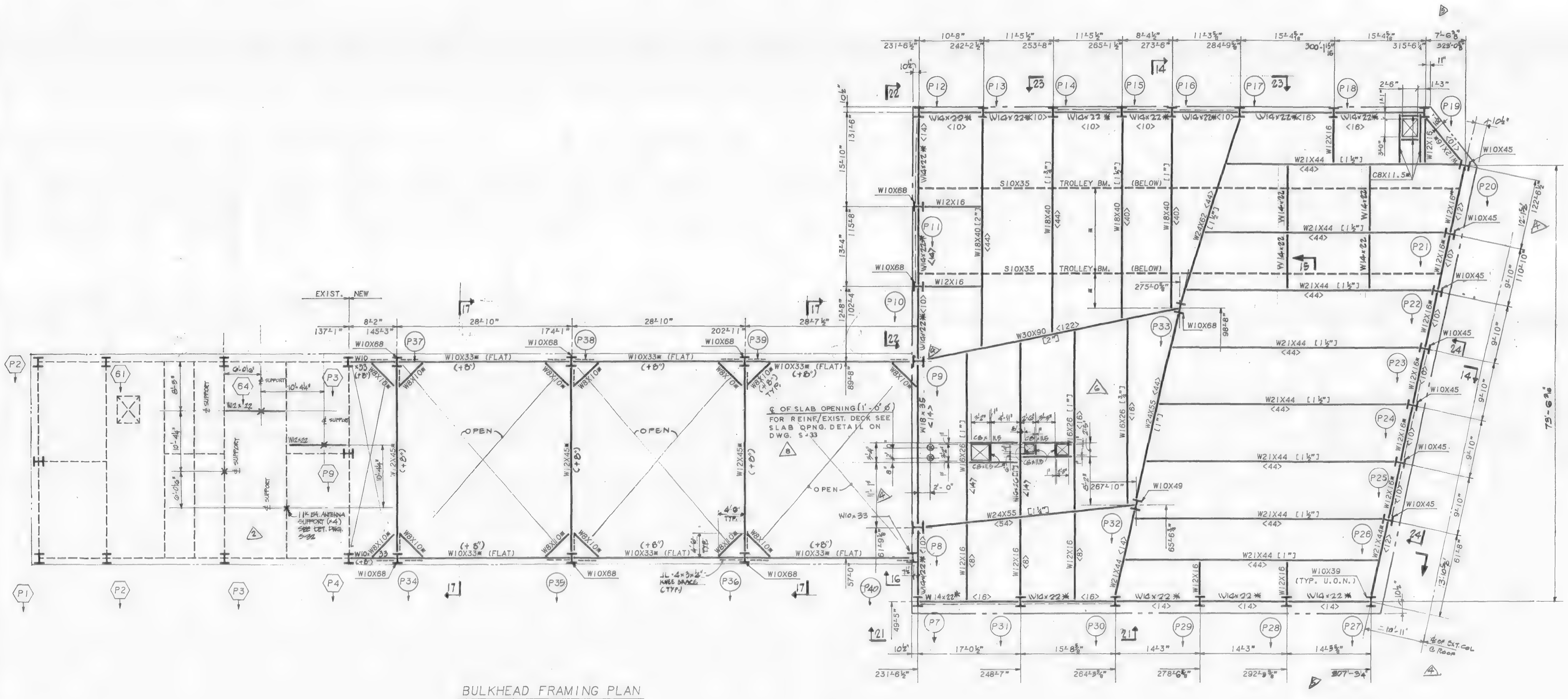
Date:
Scale:
Sheet No. S-23

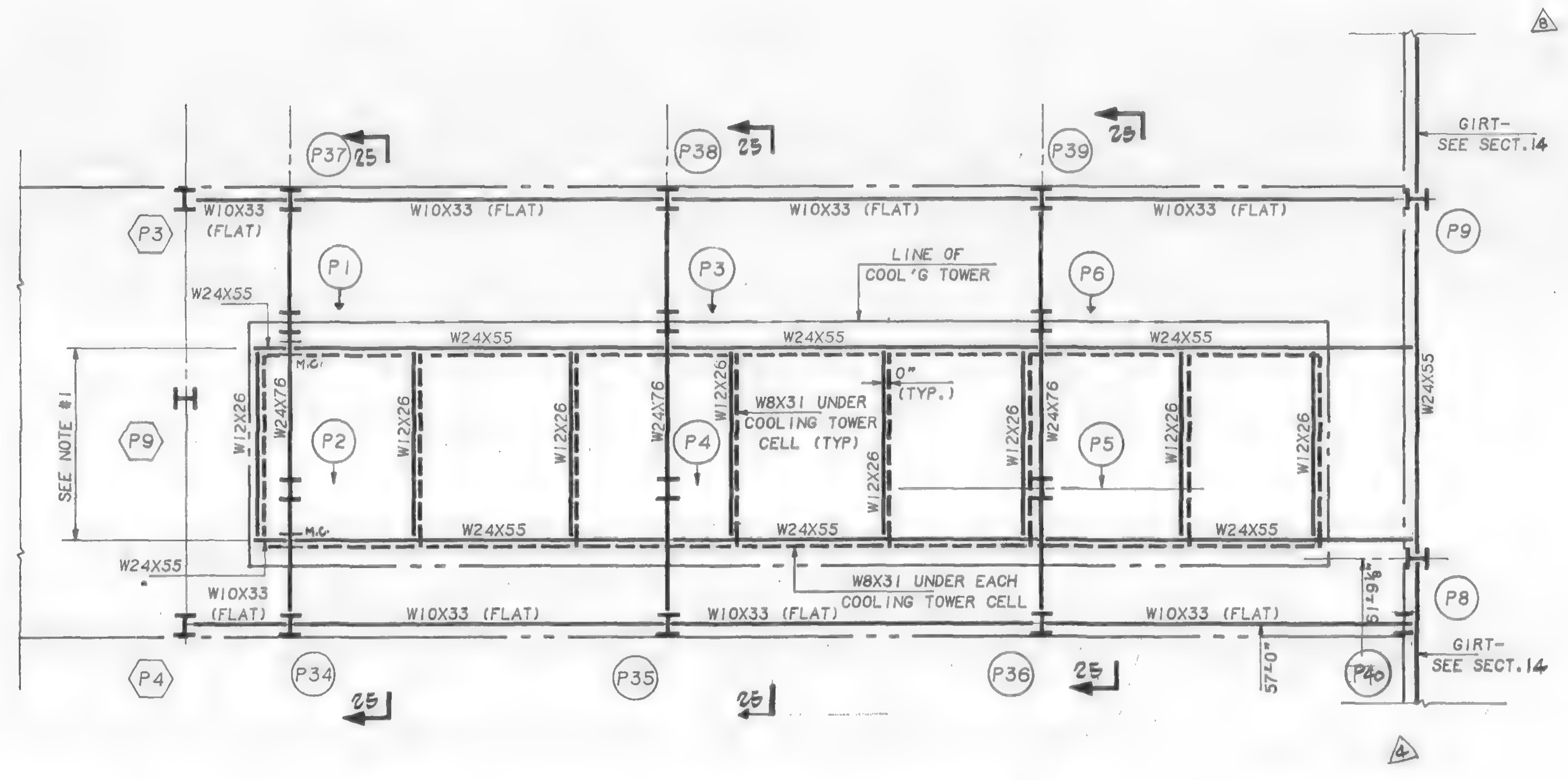
88057



BULKHEAD FRAMING PLAN

NOTES:

1. SLAB SHALL BE 5½" (3"+2½") MIN. THICK STONE CONC. HAVING A COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS PLACED OVER 3" DEEP, 20 GAUGE COMPOSITE METAL DECK REINF. WITH 6X6-W2.4XW2.4 W.W.F. (U.O.N.) WHERE NOTED ON PLAN, TOP OF STRUCTUREAL SLAB SLOPES. H.P. EL. = 946'-6½" AND L.P. EL. = 946'-4" U.O.N. ON PLAN. SEE ARCH. DWGS. FOR SLOPE.
2. TOP OF STEEL SHALL BE AT EL. 945'-10½" UNLESS NOTED THUS (±...) INDICATING DISTANCE ABOVE OR BELOW EL. 946'-4".
3. ALL BEAMS SHALL BE ASTM 572, GRADE 50 STEEL U.O.N. THUS * INDICATING A36 STEEL.
4. FOR TYPICAL SUPERSTRUCTURE DETAILS SEE DWG. S-32 & S-33. FOR SUPERSTRUCTURE GENERAL NOTES SEE DWG. S-32.
5. <...> INDICATES SHEAR CONNECTORS.
6. [...] INDICATES CAMBER.
7. FLOOR SLAB SHALL BE SHORED AS PER MANUFACTURER'S REQUIREMENTS.
8. ALL POSTS SHALL BE W10X39 U.O.N. ON PLAN.
9. (P..) INDICATES NEW POST GOING DOWN.
10. * TROLLEY BEAM LOCATION TO BE COORDINATED WITH CHILLER SHOP DGWS.



COOLING TOWER SUPPORT FRAMING PLAN

NOTES:

1. LOCATION OF COOLING TOWER SUPPORT BEAMS TO BE COORDINATED WITH COOLING TOWER SHOP DRAWINGS.
2. FOR TOP OF STEEL EL. SEE MECHANICAL DWGS
3. ALL STEEL BEAMS SHALL BE ASTM A36 (fy = 36) U.O.N. STEEL BEAMS THUS NOTED (*) IN PLAN SHALL BE ASTM A572 GRADE 50.
4. ALL BOLT HOLES REQUIRED FOR COOLING TOWER SHALL BE PROVIDED AS PER CERTIFIED COOLING TOWER SHOP DWGS.

6.9.95

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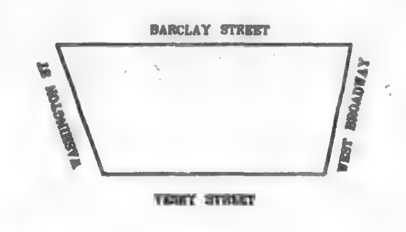

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
	6.9.95	AS BUILT-REF. ISSUE 11.5.93
	11.5.93	ISSUED FOR P. A. REVIEW
8	9-18-90	ISSUED FOR BULLETIN #120
7	8-17-90	ISSUED FOR BULLETIN #116
6	7-3-90	ISSUED FOR BULLETIN #103
5	6/15/89	REVISED AS CIRCLED
4	5.22.89	REVISED AS CIRCLED
3	4/6/89	REVISED AS CIRCLED
2	3/1/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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BULKHEAD
FRAMING PLANS

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Scale:
Sheet No. S-24

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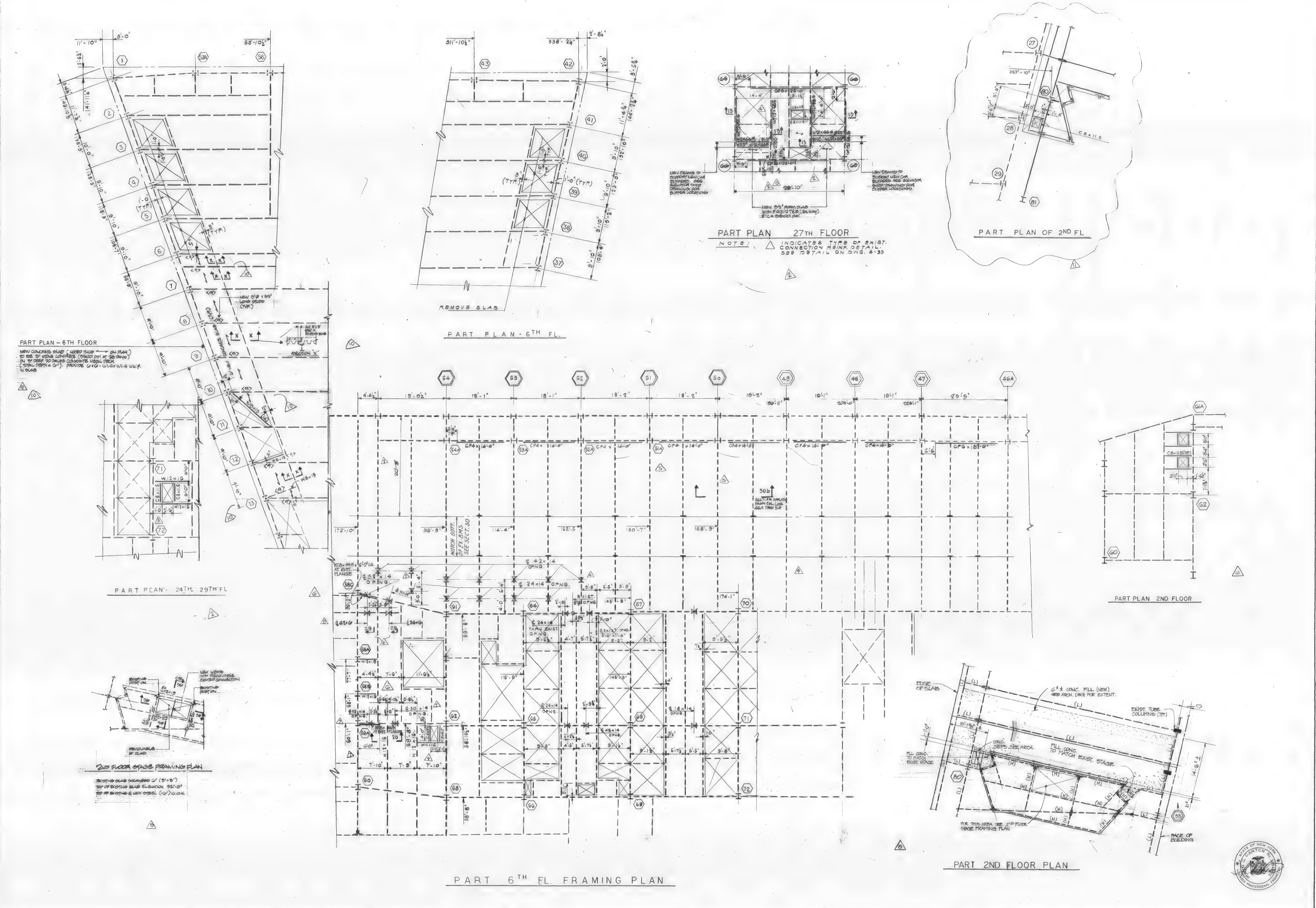

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BARCLAY STREET
VESEY STREET
WEST BROADWAY
KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	6-7-90	ISSUED FOR BULLETIN No 94
10	12/8/89	ISSUED BULLETIN No.
9	11/22/89	ISSUED BULLETIN NO. 12
8	10/9/89	REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	6-12-89	REVISED AS CIRCLED
5	5-22-89	REVISED AS CIRCLED
4	4-6-89	REVISED AS CIRCLED
	4-4-89	ISSUED TO CON EDISON FOR APPROVAL
3	3/1/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE BEX
	12/19/88	ISSUED TO P.A.

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PART PLANS

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Project No.:
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Sheet No. S-25

#88037 202.

COL. NO.	(above Main Roof)	47TH FL. (14'-10")	46TH FL. (12'-9")	45TH FL. (12'-9")	44TH FL. (12'-9")	43RD FL. (12'-9")	42ND FL. (12'-9")	41ST FL. (12'-9")	40TH FL. (12'-9")	39TH FL. (12'-9")	38TH FL. (12'-9")	37TH FL. (12'-9")	36TH FL. (12'-9")	35TH FL. (12'-9")	34TH FL. (12'-9")	33RD FL. (12'-9")	32ND FL. (12'-9")	31ST FL. (12'-9")	EL. 309'-3"
1		W14 X90 / 38	X109 / 78	W14 / 120	X159 / 157	W14 / 220	X193 / 252	W14 / 283	X233 / 315	W14 / 347	X283 / 364	W14 / 398	X342 / 430	W14 / 465	X398 / 527	W14 / 587	X455 / 620	W14 / 650	688
2		W14 X90 / 31	X109 / 74	W14 / 113	X132 / 153	W14 / 222	X176 / 252	W14 / 282	X211 / 312	W14 / 341	X233 / 355	W14 / 387	X283 / 416	W14 / 461	X311 / 513	W14 / 612	X342 / 642	W14 / 672	702
3		W14 X90 / 24	X109 / 62	W14 / 86	X132 / 132	W14 / 192	X176 / 219	W14 / 246	X211 / 273	W14 / 300	X233 / 330	W14 / 357	X283 / 384	W14 / 414	X311 / 481	W14 / 521	X342 / 548	W14 / 575	602
4		W14 X90 / 25	X109 / 59	W14 / 90	X132 / 121	W14 / 179	X176 / 205	W14 / 231	X211 / 257	W14 / 283	X257 / 311	W14 / 336	X311 / 362	W14 / 391	X342 / 453	W14 / 493	X342 / 519	W14 / 544	570
5		W14 X90 / 62	X109 / 145	W14 / 216	X176 / 257	W14 / 451	X193 / 508	W14 / 566	X257 / 623	W14 / 680	X257 / 744	W14 / 801	X311 / 859	W14 / 916	X342 / 1081	W14 / 1128	X370 / 1281	W14 / 1338	1395
6		W14 X109 / 40	X145 / 90	W14 / 134	X176 / 183	W14 / 246	X193 / 288	W14 / 330	X257 / 371	W14 / 412	X311 / 454	W14 / 495	X342 / 536	W14 / 576	X370 / 642	W14 / 683	X370 / 723	W14 / 764	805
7		W14 X109 / 32	X145 / 74	W14 / 111	X193 / 147	W14 / 183	X257 / 219	W14 / 255	X311 / 290	W14 / 326	X342 / 362	W14 / 398	X370 / 434	W14 / 469	X370 / 505	W14 / 541	X398 / 577	W14 / 613	648
8		W14 X109 / 30	X145 / 69	W14 / 103	X193 / 136	W14 / 170	X257 / 203	W14 / 236	X311 / 269	W14 / 303	X342 / 336	W14 / 369	X370 / 402	W14 / 435	X370 / 469	W14 / 502	X398 / 535	W14 / 568	601
9		W14 X109 / 27	X145 / 63	W14 / 94	X193 / 125	W14 / 156	X257 / 183	W14 / 209	X311 / 236	W14 / 262	X342 / 288	W14 / 315	X370 / 341	W14 / 367	X370 / 395	W14 / 422	X398 / 452	W14 / 483	513
10		W14 X109 / 27	X145 / 61	W14 / 92	X193 / 122	W14 / 152	X257 / 178	W14 / 204	X311 / 230	W14 / 256	X342 / 282	W14 / 308	X370 / 335	W14 / 361	X370 / 390	W14 / 416	X398 / 443	W14 / 469	495
11		W14 X109 / 25	X145 / 58	W14 / 89	X176 / 118	W14 / 146	X193 / 171	W14 / 195	X257 / 220	W14 / 245	X311 / 269	W14 / 294	X342 / 319	W14 / 343	X370 / 371	W14 / 396	X370 / 421	W14 / 445	470
12		W14 X90 / 24	X109 / 54	W14 / 82	X176 / 109	W14 / 136	X193 / 159	W14 / 182	X257 / 206	W14 / 229	X257 / 253	W14 / 276	X311 / 299	W14 / 323	X342 / 349	W14 / 373	X370 / 396	W14 / 419	443
13		W14 X90 / 23	X109 / 50	W14 / 77	X132 / 103	W14 / 128	X176 / 150	W14 / 172	X211 / 194	W14 / 216	X257 / 238	W14 / 260	X311 / 282	W14 / 304	X342 / 329	W14 / 351	X342 / 373	W14 / 395	417
14		W14 X90 / 21	X109 / 47	W14 / 72	X132 / 97	W14 / 121	X176 / 143	W14 / 164	X211 / 184	W14 / 205	X233 / 226	W14 / 247	X283 / 268	W14 / 289	X311 / 312	W14 / 332	X342 / 353	W14 / 374	395
14A		W14 X90 / 18	X109 / 39	W14 / 59	X132 / 80	W14 / 100	X176 / 118	W14 / 136	X211 / 153	W14 / 171	X283 / 188	W14 / 205	X283 / 223	W14 / 240	X311 / 259	W14 / 277	X342 / 294	W14 / 311	329
15		W14 X90 / 16	X109 / 44	W14 / 81	X159 / 116	W14 / 150	X193 / 180	W14 / 210	X233 / 240	W14 / 270	X283 / 300	W14 / 330	X342 / 360	W14 / 390	X398 / 424	W14 / 454	X455 / 484	W14 / 514	544
16				W14 X109 / 102	X159 / 152	W14 / 203	X193 / 244	W14 / 286	X233 / 327	W14 / 369	X311 / 410	W14 / 452	X398 / 493	W14 / 534	X455 / 585	W14 / 626	X500 / 668	W14 / 709	751
17				W14 X120 / 97	X159 / 146	W14 / 195	X193 / 235	W14 / 275	X233 / 315	W14 / 355	X311 / 396	W14 / 436	X370 / 476	W14 / 516	X398 / 565	W14 / 605	X426 / 645	W14 / 685	726
17A																			
18				W14 X159 / 112	X176 / 162	W14 / 212	X211 / 266	W14 / 312	X233 / 366	W14 / 412	X311 / 466	W14 / 512	X370 / 558	W14 / 605	X398 / 661	W14 / 707	X426 / 754	W14 / 800	846
18A																			
19				W14 X159 / 112	X176 / 162	W14 / 212	X211 / 266	W14 / 312	X233 / 366	W14 / 412	X311 / 466	W14 / 512	X342 / 558	W14 / 605	X370 / 661	W14 / 707	X398 / 754	W14 / 800	846
19A																			
20				W14 X176 / 110	X211 / 167	W14 / 223	X233 / 272	W14 / 318	X257 / 367	W14 / 414	X311 / 463	W14 / 509	X342 / 556	W14 / 612	X370 / 668	W14 / 714	X398 / 761	W14 / 807	853
21				W14 X176 / 110	X211 / 167	W14 / 223	X233 / 229	W14 / 285	X257 / 291	W14 / 347	X311 / 353	W14 / 408	X342 / 454	W14 / 510	X370 / 567	W14 / 613	X398 / 659	W14 / 706	752
21A																			
22				14 X176 / 110	X211 / 167	W14 / 223	X233 / 229	W14 / 285	X257 / 291	W14 / 347	X145 / 353	W14 / 408	X342 / 454	W14 / 510	X370 / 567	W14 / 613	X398 / 659	W14 / 706	752
22A																			
23				W14 X176 / 110	X211 / 167	W14 / 223	X233 / 229	W14 / 285	X257 / 291	W14 / 347	X145 / 353	W14 / 408	X342 / 454	W14 / 510	X370 / 567	W14 / 613	X398 / 659	W14 / 706	752
23A																			
24				W14 X159 / 128	X176 / 192	W14 / 257	X211 / 264	W14 / 328	X233 / 335	W14 / 400	X145 / 407	W14 / 472	X342 / 525	W14 / 589	X370 / 654	W14 / 707	X398 / 760	W14 / 813	867
24A																			
25				W14 X159 / 128	X176 / 192	W14 / 257	X211 / 264	W14 / 328	X233 / 335	W14 / 400	X311 / 407	W14 / 472	X370 / 525	W14 / 589	X398 / 654	W14 / 707	X426 / 760	W14 / 813	867
25A																			
26				W14 X120 / 128	X159 / 209	W14 / 291	X193 / 297	W14 / 378	X233 / 394	W14 / 466	X145 / 472	W14 / 553	X370 / 619	W14 / 701	X398 / 782	W14 / 848	X426 / 915	W14 / 981	1047
27				W14 X109 / 139	X159 / 153	W14 / 177	X193 / 184	W14 / 209	X233 / 216	W14 / 240	X311 / 247	W14 / 271	X398 / 293	W14 / 317	X455 / 341	W14 / 363	X500 / 385	W14 / 407	428
28		W14 X90 / 5	X109 / 29	W14 / 93	X159 / 128	W14 / 162	X193 / 195	W14 / 230	X233 / 263	W14 / 297	X283 / 331	W14 / 365	X342 / 396	W14 / 430	X398 / 464	W14 / 495	X455 / 526	W14 / 556	587
29		W14 X90 / 14	X109 / 29	W14 / 50	X132 / 95	W14 / 140	X176 / 182	W14 / 227	X211 / 269	W14 / 314	X233 / 357	W14 / 401	X283 / 439	W14 / 483	X311 / 527	W14 / 564	X342 / 601	W14 / 638	675
30		W14 X90 / 11	X109 / 28	W14 / 48	X132 / 91	W14 / 133	X176 / 173	W14 / 215	X211 / 255	W14 / 297	X233 / 337	W14 / 379	X283 / 414	W14 / 456	X311 / 497	W14 / 532	X342 / 567	W14 / 602	637
31		W14 X90 / 31	X109 / 70	W14 / 127	X132 / 171	W14 / 221	X176 / 263	W14 / 313	X211 / 355	W14 / 406	X283 / 447	W14 / 491	X311 / 532	W14 / 575	X342 / 615	W14 / 655	X342 / 695	W14 / 735	775
32	35	W14 X90 / 76	X109 / 121	W14 / 167	X176 / 212	W14 / 256	X193 / 299	W14 / 344	X257 / 387	W14 / 431	X283 / 479	W14 / 519	X311 / 560	W14 / 605	X342 / 649	W14 / 695	X370 / 741	W14 / 787	833

(Each cell: section in E column / figure in N column. FLOOR rows run E, N for each column number. Main roof is above 47TH FL.)

(1ST DIMENSION PARALLEL TO WEB)

BASE ℄

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

KEY PLAN

BARCLAY STREET — WEST BROADWAY — VESEY STREET — WASHINGTON ST

NOTES

LEGEND

No.	Date	Revision
2	3/1/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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COLUMN SCHEDULE #1

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Project No.:
Date:
Scale:
Sheet No. S-26

88057

COLUMN SCHEDULE #2

COL. NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14A	15	16	17	17A	18	18A	19	19A	20	21	21A	22	22A	23	23A	24	24A	25	25A	26	27	28	29	30	31	32
FLOOR	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N
BASE ℄ (1ST DIMENSION PARALLEL TO WEB)	25X21X1"							28X28X5"				25X20X2 3/8"				25X20X1 3/4"	25X20X2"		24X20X2 3/8"		24X20X1"		24X20X2 1/2"	24X20X2 1/2"		24X20X2 3/8"				24X20X1"		24X20X2 1/2"		25X20X1"			25X21X4"				28X28X5 1/2"

Floors: 31ST FL., 30TH FL., 29TH FL., 28TH FL., 27TH FL., 26TH FL., 25TH FL., 24TH FL., 23RD FL., 22ND FL., 21ST FL., 20TH FL., 19TH FL., 18TH FL., 17TH FL., 16TH FL., 15TH FL., 14TH FL., 13TH FL., 12TH FL., 11TH FL., 10TH FL., 9TH FL., 8TH FL., 7TH FL., 6TH FL., 5TH FL., 4TH FL., 3RD FL., 2ND FL., 1ST FL. EL. 309'-3" (DIMENSION TO BOTT. OF BASE ℄ FROM REFERENCE EL.)

Column sections: W14 X370 – X730; TRUSS SEE DWG. S-20; SEE DETAIL "A"; W14 SLOP'ING.

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

BARCLAY STREET — WEST BROADWAY — VESEY STREET — GREENWICH STREET

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
	3/1/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONSTR.
	12/9/88	[illegible]

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COLUMN SCHEDULE #2

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Project No. | Sheet No. S-27
Date:
Scale:

88061

WTCI-2-SOM

Column Schedule #3 (column sizes by tier, E = East, N = North)

FLOOR	33	34	35	36	37	38	39	40	41	42	43	44	44A	45	45A	46	46A
31ST FL. – 29TH FL. (12'-9")	W14 X730	W14 X398	W14 X426	W14 X398	W14 X370	W14 X370	W14 X370	W14 X370	W14 X370	W14 X550	W14 X455	W14 X455		W14 X455		W14 X455	
28TH FL. – 27TH FL. (12'-9")	W14 X398	W14 X426	W14 X426	W14 X426	W14 X398	W14 X398	W14 X398	W14 X398	W14 X426	W14 X605	W14 X500	W14 X500		W14 X500		W14 X500	
26TH FL. – 25TH FL. (12'-9")	W14 X426	W14 X455	W14 X455	W14 X455	W14 X426	W14 X426	W14 X426	W14 X426	W14 X500	W14 X605	W14 X500	W14 X500		W14 X500		W14 X500	
24TH FL. – 23RD FL. (12'-9", 14'-9")	W14 X426	W14 X455	W14 X455	W14 X455	W14 X426	W14 X426	W14 X426	W14 X426	W14 X500	W14 X730	W14 X500	W14 X500		W14 X500		W14 X500	
22ND FL. – 21ST FL. (14'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X605	W14 X730	W14 X550	W14 X550		W14 X550		W14 X550	
20TH FL. – 19TH FL. (12'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X665	W14 X730	W14 X550	W14 X550		W14 X550		W14 X550	
18TH FL. – 17TH FL. (12'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X665	W14 X730	W14 X605	W14 X605		W14 X550		W14 X550	
16TH FL. – 15TH FL. (12'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X665	W14 X730	W14 X605	W14 X605		W14 X550		W14 X550	
14TH FL. – 13TH FL. (12'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X665	W14 X730	W14 X605	W14 X605		W14 X550		W14 X550	
12TH FL. – 11TH FL. (12'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X665	W14 X730	W14 X665	W14 X665		W14 X550 +2 WEB ℄'S 12X1"		W14 X605	
10TH FL. – 9TH FL. (12'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X665	W14 X730	W14 X665	W14 X665		W14 X550 +2 WEB ℄'S 12X1"		W14 X605	
8TH FL. – 7TH FL. (12'-9")	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X500	W14 X550	W14 X550	W14 X665	W14 X730 +2 WEB ℄'S 12½"X6"*	W14 X665	W14 X665		W14 X605		W14 X605	
6TH FL. – 5TH FL. (13'-3", 13'-0")	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	W14X 730 +2 SIDE ℄'S 26X4"*	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	W14X 730 +2 WEB ℄'S 12½"X6"*	TRUSS SEE DWG. S-19		W14 X730* SLOP ING		W14 X605 SLOP ING		W14 X665 SLOP ING
4TH FL. – 3RD FL. (14'-3", 14'-0")	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	W14X 730 +2 SIDE ℄'S 26X4"*	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	TRUSS SEE DWG. S-20	W14X 730 +2 WEB ℄'S 12½"X8"*			W14 X730 +2 WEB ℄'S 12½"X1½"*		W14 X730		W14 X665
2ND FL. – 1ST FL. (14'-1½", 11'-1½")	TRUSS SEE DWG. S-20				TRUSS SEE DWG. S-20	W14X 730 +2 SIDE ℄'S 26X4"*	TRUSS SEE DWG. S-20		TRUSS SEE DWG. S-20	W14X 730 +2 WEB ℄'S 12½"X8"*			W14 X730 +2 WEB ℄'S 12½"X1½"*		W14 X730		W14X 730+2 ℄'S 12½"X6½" X4'-0" (SEE DET. DWG. S-17A)
EL. 309'-3" (DIMENSION TO BOTT. OF BASE ℄ FROM REFERENCE EL.)						6'-7½"				4'-10"					11'-2"		11'-2"
BASE ℄ (1ST DIMENSION PARALLEL TO WEB)						28X30X2½				25X21X4"			25X20X1"		25X20X1½"		25X24X1½"

FLOOR	47	47A	48	48A	49	49A	50	50A	51	51A	52	52A	53	53A	54	54A	55	55A	56	57	57A
31ST FL. – 29TH FL.	W14 X455		W14 X455		W14 X455		W14 X455		W14 X455		W14 X455		W14 X455		W14 X455		W14 X455		W14 X455	W14 X455	
28TH FL. – 27TH FL.	W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500	W14 X500	
26TH FL. – 25TH FL.	W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500	W14 X500	
24TH FL. – 23RD FL.	W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500		W14 X500	W14 X500	
22ND FL. – 21ST FL.	W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550	W14 X550	
20TH FL. – 19TH FL.	W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550	W14 X550	
18TH FL. – 17TH FL.	W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X605	W14 X605	
16TH FL. – 15TH FL.	W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X605	W14 X605	
14TH FL. – 13TH FL.	W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X550		W14 X605	W14 X605	
12TH FL. – 11TH FL.	W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X550 +2 WEB ℄'S 12X1"		W14 X665	W14 X665	
10TH FL. – 9TH FL.	W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X605		W14 X550 +2 WEB ℄'S 12X1"		W14 X665	W14 X665	
8TH FL. – 7TH FL.	W14 X605	MG-27 SEE DWG S-23	W14 X605	MG-27 SEE DWG S-23	W14 X605	MG-27 SEE DWG S-23	W14 X605	MG-27 SEE DWG S-23	W14 X605	MG-27 SEE DWG S-23	W14 X605	MG-27 SEE DWG S-23	W14 X605	MG-27 SEE DWG S-23	W14 X605	MG-27 SEE DWG S-23	W14 X605		W14 X665	W14 X665	
6TH FL. – 5TH FL.		W14X 665		W14X 665		W14X 665		W14X 665		W14X 665		W14X 665		W14X 665		W14X 665		W14 X730* SLOP ING	TRUSS SEE DWG. S-19		W14 X730 SLOP ING
4TH FL. – 3RD FL.		W14 X665		W14 X665		W14 X665		W14 X665		W14 X665		W14 X665		W14 X665		W14 X665		W14X 730 +2 WEB ℄'S 12½"X1"*			W14 X730
2ND FL. – 1ST FL.		EXIST. COL. (2")		EXIST. COL. (2")		EXIST. COL. (2")		EXIST. COL. (2")		EXIST. COL. (2")		EXIST. COL. (2")		EXIST. COL. (2")		EXIST. COL. (2")		W14 X730 + 2 WEB ℄'S 12½" X1"*			W14 X730
EL. 309'-3"																		11'-2"			11'-2"
BASE ℄																		25X20X1"			25X20X1½"

No.	Date	Revision		
2	3/7/89	REVISED AS CIRCLED		
	1/3/89	ISSUED FOR CONST.		
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS		

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

KEY PLAN: BARCLAY STREET, WEST BROADWAY, VESEY STREET, WASHINGTON ST.

NOTES

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COLUMN SCHEDULE #3

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Project No.: Date: Scale: Sheet No. S-28

88057

COL. NO. / FLOOR	33 E	33 N	34 E	34 N	35 E	35 N	36 E	36 N	37 E	37 N	38 E	38 N	39 E	39 N	40 E	40 N
MAIN ROOF																
47TH FL. (14'-10")	W14 X109	93	W14 X109	76	W14 X109	76	W14 X109	93	W14 X109	89	W14 X90	93	W14 X90	93	W14 X90	89
46TH FL. (12'-9")	X145	137	X145	180	X145	121	X145	137	X145	133	X109	137	X109	137	X109	133
45TH FL. (14'-3")	W14	181	W14	166	W14	166	W14	182	W14	180	W14	182	W14	182	W14	180
44TH FL. (12'-9")	X176	226	X193	211	X193	211	X193	227	X176	233	X176	227	X132	227	X132	233
43RD FL. (12'-9")	W14	271	W14	267	W14	258	W14	272	W14	304	W14	272	W14	272	W14	304
42ND FL. (12'-9")	X193	314	X342	310	X342	298	X342	315	X193	347	X193	315	X176	316	X176	347
41ST FL. (12'-9")	W14	358	W14	367	W14	343	W14	359	W14	419	W14	359	W14	359	W14	419
40TH FL. (12'-9")	X257	401	X311	410	X311	386	X311	402	X257	462	X257	402	X211	402	X211	462
39TH FL. (12'-9")	W14	446	W14	466	W14	430	W14	447	W14	533	W14	447	W14	447	W14	533
38TH FL. (12'-9")	X311	490	X342	509	X342	473	X342	490	X311	577	X283	490	X283	490	X233	577
37TH FL. (12'-9")	W14	535	W14	554	W14	518	W14	534	W14	622	W14	534	W14	534	W14	622
36TH FL. (12'-9")	X342	572	X370	591	X370	555	X370	572	X370	660	X311	572	X311	572	X283	660
35TH FL. (12'-9")	W14	616	W14	636	W14	600	W14	616	W14	705	W14	616	W14	616	W14	705
34TH FL. (12'-9")	X370	661	X370	680	X370	644	X370	661	X370	750	X342	661	X342	661	X311	750
33RD FL. (12'-9")	W14	709	W14	728	W14	688	W14	698	W14	788	W14	698	W14	698	W14	788
32ND FL. (12'-9")	X370	756	X398	776	X398	731	X398	735	X370	826	X370	733	X342	735	X342	826
31ST FL. (14'-9")	W14	804	W14	824	W14	775	W14	773	W14	863	W14	773	W14	773	W14	863

COL. NO. / FLOOR	41 E	41 N	42 E	42 N	43 E	43 N	44 E	44 N	44A E	44A N	45 E	45 N	45A E	45A N	46 E	46 N	46A E	46A N
MAIN ROOF																		
47TH FL.	W14 X90	80	W14 X90	60	W14 X99	44	W14 X99	276			W14 X99	207			W14 X99	199		
46TH FL.	X109	134	X109	103	X120	75	X120	378			X120	289			X120	276		
45TH FL.	W14	182	W14	148	W14	105	W14	487			W14	374			W14	356		
44TH FL.	X132	228	X159	180	X145	133	X145	595			X159	460			X159	436		
43RD FL.	W44	274	W14	217	W14	161	W14	1-SOUTH SIDE PL. 12¾ x ½ 703			W14	546			W14	516		
42ND FL.	X176	319	X193	254	X159	189	X159*	710			X193	556			X193	523		
41ST FL.	W14	365	W14	292	W14	217	W14	819			W14	642			W14	603		
40TH FL.	X211	410	X233	329	X193	244	X193*	826			X233	653			X233	610		
39TH FL.	W14	456	W14	367	W14	272	W14	934			W14	738			W14	690		
38TH FL.	X233	500	X283	404	X257	300	X257	941			X283	749			X283	697		
37TH FL.	W14	547	W14	442	W14	328	W14	1060			W14	835			W14	777		
36TH FL.	X283	585	X342	476	X283	357	X283	1137			X311	905			X311	842		
35TH FL.	W14	631	W14	514	W14	381	W14	1245			W14	990			W14	922		
34TH FL.	X311	678	X398	552	X370	410	X370	1353			X370	1076			X370	1008		
33RD FL.	W14	716	W14	582	W14	435	W14	1441			W14	1146			W14	1067		
32ND FL.	X342	755	X455	620	X426	460	X426	1528			X426	1216			X426	1138		
31ST FL.	W14	793	W14	654	W14	485	W14	1615			W14	1287			W14	1197		

COL. NO. / FLOOR	47 E	47 N	47A E	47A N	48 E	48 N	48A E	48A N	49 E	49 N	49A E	49A N	50 E	50 N	50A E	50A N	51 E	51 N	51A E	51A N
MAIN ROOF																				
47TH FL.	W14 X120	20		47	W14 X120	15			W14 X120	15			W14 X120	16			W14 X120	16		
46TH FL.	X159	26			X159	21			X176	21			X176	21			X176	22		
45TH FL.	W14	128		45	W14	136			W14	136			W14	136			W14	137		
44TH FL.	X176	177			X176	226			X233	226			X233	225			X233	226		
43RD FL.	W14	253			W14	300			W14	300			W14	300			W14	300		
42ND FL.	X233	259		42	X233	306			X283	306			X283	306			X283	335		
41ST FL.	W14	335			W14	380			W14	380			W14	380			W14	381		
40TH FL.	X283	341		40	X283	386			X311	386			X311	386			X311	416 40		
39TH FL.	W14	416			W14	459			W14	459			W14	459			W14	463		
38TH FL.	X311	422			X311	465			X342	465			X342	465			X342	498		
37TH FL.	W14	498		37	W14	539			W14	539			W14	539			W14	571		
36TH FL.	X342	559			X342	599			X370	599			X370	599			X370	631		
35TH FL.	W14	635			W14	673			W14	673			W14	673			W14	676		
34TH FL.	X398	711		34	X398	747			X398	747			X398	747			X398	749		
33RD FL.	W14	772			W14	807			W14	807			W14	807			W14	809		
32ND FL.	X426	834		32	X426	867			X426	867			X426	867			X426	865		
31ST FL.	W14	895			W14	927			W14	927			W14	927			W14	928		

COL. NO. / FLOOR	52 E	52 N	52A E	52A N	53 E	53 N	53A E	53A N	54 E	54 N	54A E	54A N	55 E	55 N	55A E	55A N	56 E	56 N	57 E	57 N	57A E	57A N
MAIN ROOF																						
47TH FL.	W14 X120	14			W14 X120	54			W14 X120	306			14 X99	74			W14 X99	75	W14 X99	20		
46TH FL.	X159	70			X159	76			X120	395			X120	366			X120	757	X120	44		
45TH FL.	W14	134	45		W14	291			W14	470			W14	451			W14	243	W14	68		
44TH FL.	X176	224			X176	380			X159	544			X159	536			X145	329	X145	91		
43RD FL.	W14	296			W14	453			W14	648			W14	689			W14	517	W14	130		
42ND FL.	X233	363	42		X233	519			X193	708			X193	758			X159*	587	X159	150		
41ST FL.	W14	422			W14	578			W14	768			W14	887			W14	657	W14	170		
40TH FL.	X283	489			X283	643			X233	829	40		X233	896			X193	726	X193	190		
39TH FL.	W14	548			W14	702			W14	889			W14	965			W14	796	W14	210		
38TH FL.	X311	615			X311	768			X283	926			X283	1042			X257	873	X257	230		
37TH FL.	W14	674			W14	827			W14	986			W14	1111			W14	943	W14	250		
36TH FL.	X342	733			X342	886	36		X311	1047			X311	1180			X283	1012	X283	270		
35TH FL.	W14	793			W14	945			W14	1106			W14	1249			W14	1082	W14	290		
34TH FL.	X398	865			X398	1018			X370	1209			X370	1402			X370	1270	X370	328		
33RD FL.	W14	925	33		W14	1077			W14	1283			W14	1475			W14	1340	W14	354		
32ND FL.	X426	984			X426	1136			X426	1344			X426	1544			X426	1410	X426	374		
31ST FL.	W14	1043			W14	1195			W14	1404			W14	1613			W14	1479	W14	394 △2		

EL. 309'-3"
(DIMENSION TO BOTT. OF BASE ℄ FROM REFERENCE EL.)
(1ST DIMENSION PARALLEL TO WEB)
BASE ℄ FLOOR

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

BARCLAY STREET
WEST BROADWAY
VESEY STREET
WASHINGTON ST.
KEY PLAN

NOTES

LEGEND

No.	Date	Revision
2	3/1/88	REVISED AS CIRCLED
1	1/8/88	ISSUED FOR CONST.
1	12/14/88	[illegible]

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COLUMN SCHEDULE #4

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Project No.: | Sheet No.: S-29
Date:
Scale:

88057

COL. NO.	58	58A	58B	58C	59	59A	60	61	61A	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	78A	79	80	81
FLOOR	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N
23RD FL.																														
22ND FL.																														
21ST FL.																														
20TH FL.																														
19TH FL.																														
18TH FL.																														
17TH FL.																														
16TH FL.																														
15TH FL.																														
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8TH FL.																														
7TH FL.																														
6TH FL.																														
5TH FL.																														
4TH FL.																														
3RD FL.																														
2ND FL.																														
1ST FL.																														
EL. 309'-3" (DIMENSION TO BOTT. OF BASE ℄ FROM REFERENCE EL.)																														
(1ST DIMENSION PARALLEL TO WEB)			20X20X1			22X20X1½	25X20X2½	5X20X1		20X20X3½	25X20X4		25X18X1½	25X20X2		25X20X2	25X20X2½		25X20X2½	25X20X2½		25X20X3	25X20X2				SEE DET. DWG. FS-2	28X30X2½	28X30X2½	25X20X1
BASE ℄ FLOOR	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N	E N
COL. NO.	58	58A	58B	58C	59	59A	60	61	61A	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	78A	79	80	81

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
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BARCLAY STREET
WEST BROADWAY
VESEY STREET
KEY PLAN

NOTES

LEGEND

No.	Date	Revision
2	3/1/89	REVISED AS CIRCLED
	1/9/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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STATE OF NEW YORK · IRWIN G. CANTOR · LICENSED PROFESSIONAL ENGINEER

COLUMN SCHEDULE #5

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Project No.:
Date:
Scale:
Sheet No. S-30

88057

COL. NO. / FLOOR	Ht.	58 E	58 N	59 E	59 N	60 E	60 N	61 E	61 N	62 E	62 N	63 E	63 N	64 E	64 N	65 E	65 N	66 E	66 N	67 E	67 N	68 E	68 N	69 E	69 N
BULKHEAD ROOF																									
MAIN ROOF								W14 X90*	31		29			W14 X90*	35		35		11						
47TH FL.	14'-10"	W14 X99*	154	W14 X90*	97	W14 X90*	63		170	W14 X90*	134	W14 X90*	86		186	W14 X90*	225	W14 X90*	85	W14 X90*	159	W14 X90*	194	W14 X90*	69
46TH FL.	12'-9"	W14 X109*	553	W14 X90*	183	W14 X90*	135	W14 X99*	435	W14 X90*	229	W14 X90*	184	W14 X99*	408	W14 X90*	602	W14 X90*	236	W14 X99*	367	W14 X90*	510	W14 X90*	183
45TH FL.	12'-9"		711		264		251		552		300		310		550		624		356		595		618		342
44TH FL.	12'-9"	W14 X145*	902	W14 X99*	344	W14 X99*	342	W14 X132*	695	W14 X99*	367	W14 X99*	390	W14 X120*	869	W14 X90*	645	W14 X99*	422	W14 X132*	730	W14 X99*	668	W14 X99*	434
43RD FL.	12'-9"		1128		425		432		887		437		470		864		666		487		866		733		527
42ND FL.	12'-9"	W14 X193*	1262	W14 X109*	495	W14 X109*	503	W14 X159*	978	W14 X109*	497	W14 X109*	535	W14 X145*	973	W14 X99*	683	W14 X109*	543	W14 X159*	1014	W14 X109*	783	W14 X109*	632
41ST FL.	12'-9"		1395		565		574		1070		557		601		1041		699		599		1150		834		725
40TH FL.	12'-9"	W14 X233*	1529	W14 X132*	635	W14 X132*	645	W14 X193*	1161	W14 X132*	616	W14 X132*	666	W14 X176*	1149	W14 X99*	716	W14 X132*	655	W14 X193*	1297	W14 X132*	884	W14 X132*	830
39TH FL.	12'-9"		1663		706		716		1253		676		731		1236		732		712		1433		935		923
38TH FL.	12'-9"	W14 X283*	1807	W14 X145*	776	W14 X159*	787	W14 X211*	1367	W14 X145*	736	W14 X159*	796	W14 X211*	1526	W14 X109*	749	W14 X145*	768	W14 X233*	1569	W14 X159*	985	W14 X159*	1016
37TH FL.	12'-9"		1941		846		858		1461		795		861		1417		766		824		1704		1039		1109
36TH FL.	12'-9"	W14 X311*	2076	W14 X159*	922	W14 X193*	932	W14 X233*	1552	W14 X159*	854	W14 X176*	926	W14 X257*	1506	W14 X109*	782	W14 X159*	880	W14 X283*	1991	W14 X176*	1159	W14 X193*	1182
35TH FL.	12'-9"		2209		992		1003		1644		914		992		1694		799		938		2109		1211		1275
34TH FL.	12'-9"	W14 X370*	2435	W14 X193*	1072	W14 X211*	1094	W14 X283*	1835	W14 X176*	988	W14 X193*	1074	W14 X283*	1788	W14 X120*	820	W14 X176*	1001	W14 X311*	2228	W14 X193*	1264	W14 X211*	1368
33RD FL.	12'-9"		2661		1147		1168		2027		1044		1137		1971		837		1053		2346		1305		1461
32ND FL.	12'-9"	W14 X426*	2795	W14 X211*	1222	W14 X233*	1242	W14 X342*	2119	W14 X193*	1100	W14 X211*	1200	W14 X311*	2059	W14 X132*	853	W14 X193*	1104	W14 X342*	2464	W14 X211*	1347	W14 X233*	1554
31ST FL.	12'-9"		2979		1297		1316		2210		1157		1263		2148		870		1156		2582		1388		1647
30TH FL.	12'-9"	W14 X455*	3063	W14 X233*	1372	W14 X257*	1390	W14 X370*	2301	W14 X211*	1213	W14 X233*	1325	W14 X342*	2236	W14 X145*	886	W14 X211*	1207	W14 X370*	2700	W14 X233*	1429	W14 X257*	1740
29TH FL.	12'-9"		3197		1446		1464		2393		1270		1388		2324		903		1259		2851		1621		1919
28TH FL.	12'-9"	W14 X500*	3321	W14 X257*	1509	W14 X283*	1535	W14 X398*	2484	W14 X233*	1326	W14 X257*	1451	W14 X370*	2418	W14 X145*	920	W14 X233*	1310	W14 X398*	2949	W14 X257*	1649	W14 X283*	1985
27TH FL.	12'-9"		3444		1573		1606		2576		1383		1514		2501		936		1362		3068		1676		2052
26TH FL.	12'-9"	W14 X500*	3568	W14 X283*	1635	W14 X311*	1678	W14 X426*	2667	W14 X257*	1439	W14 X283*	1577	W14 X398*	2590	W14 X159*	953	W14 X257*	1413	W14 X426*	3186	W14 X257*	1704	W14 X311*	2118
25TH FL.	12'-9"		3692		1699		1748		2758		1495		1640		2678		969		1465		3304		1731		2184
24TH FL.	12'-9"	W14 X550*	3816	W14 X311*	1762	W14 X342*	1819	W14 X455*	2850	W14 X283*	1551	W14 X311*	1702	W14 X426*	2767	W14 X159*	986	W14 X283*	1516	W14 X455*	3422	W14 X283*	1759	W14 X342*	2251
23RD FL.	14'-9"		3940		1825		1890		2941		1608		1765		2855		1003		1568		3540		1787		2317
			4109		1911		1987		3062		1683		1850		2976		1025		1638		3686		1824		2404
FLOOR / COL. NO.		E 58	N	E 59	N	E 60	N	E 61	N	E 62	N	E 63	N	E 64	N	E 65	N	E 66	N	E 67	N	E 68	N	E 69	N

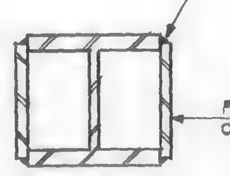
△2 (cols. 58, 61, 64)

COL. NO. / FLOOR	Ht.	70 E	70 N	71 E	71 N	72 E	72 N	73 E	73 N	74 E	74 N	75 E	75 N	76 E	76 N	77 E	77 N	78 E	78 N	79 E	79 N	80 E	80 N	81 E	81 N
BULKHEAD ROOF																									
MAIN ROOF																									
47TH FL.	14'-10"	W14 X99*	138	W14 X90*	134	W14 X90*	87	W14 X90*	145	W14 X90*	132	W14 X90*	64	W14 X90*	376	W14 X90*	205	W14 X90*	94	W14 X99*	624	W14 X90*	393	W14 X90*	118
46TH FL.	12'-9"	W14 X99*	216	W14 X90*	256	W14 X99*	217	W14 X109*	223	W14 X90*	236	W14 X99*	183	W14 X120*	582	W14 X90*	329	W14 X90*	220	W14 X132	928	W14 X99*	818	W14 X99*	296
45TH FL.	12'-9"		444		363		398		432		328		298		839		445		592		1166 (2-SIDE PL'S 12¾"x½")		790 (2-SIDE PL'S 12¾"x½")		505
44TH FL.	12'-9"	W14 X132*	605	W14 X99*	467	W14 X120*	524	W14 X145*	596	W14 X99*	420	W14 X109*	413	W14 X159*	1033	W14 X99*	562	W14 X99*	511	W14 X193*	1406	W14 X145*	963	W14 X145*	661
43RD FL.	12'-9"		774		599		635		762		523 (2-SIDE PL'S 12¾"x½")		528		1226 (2-SIDE PL'S 12¾"x½")		678 (2-SIDE PL'S 12¾"x½")		631 (2-SIDE PL'S 12¾"x½")		1682 (2-SIDE PL'S 12¾"x½")		1162 (2-SIDE PL'S 12¾"x½")		838 (2-SIDE PL'S 12¾"x½")
42ND FL.	12'-9"	W14 X159*	834	W14 X132*	731	W14 X132*	675	W14 X176*	782	W14 X132*	538	W14 X132*	545	W14 X193*	1258 (2-SIDE PL'S 12¾"X½")	W14 X120*	694 (2-SIDE PL'S 12¾"X½")	W14 X120*	643 (2-SIDE PL'S 12¾"X½")	W14 X257*	1687 (2-SIDE PL'S 12¾"X½")	W14 X193*	1167 (2-SIDE PL'S 12¾"X½")	W14 X176*	845 (2-SIDE PL'S 12¾"X½")
41ST FL.	12'-9"		984		852		796		953		641		868		1433		811		762		1962		1365		1021
40TH FL.	12'-9"	W14 X193*	1026	W14 X159*	956	W14 X159*	837	W14 X211*	970	W14 X176*	645	W14 X176*	683	W14 X257*	1446 (2 SIDE PL'S 12¾"x½")	W14 X145*	801 (2 SIDE PL'S 12¾"x½")	W14 X145*	774 (2 SIDE PL'S 12¾"x½")	W14 X311*	1687 (2 SIDE PL'S 12¾"x½")	W14 X233*	1570 (2 SIDE PL'S 12¾"x½")	W14 X211*	1026
39TH FL.	12'-9"		1200		1077		957		1141		748		804		1639		943		894		2243		1567		1203
38TH FL.	12'-9"	W14 X257*	1252	W14 X193*	1182	W14 X193*	998	W14 X257*	1277	W14 X211*	825	W14 X233*	902	W14 X311*	1758	W14 X176*	1042	W14 X176*	994	W14 X370*	2436	W14 X283*	1709	W14 X257*	1343
37TH FL.	12'-9"		1412		1286		1108		1406		886		954		1952		1136		1088		2625		1846		1477
36TH FL.	12'-9"	W14 X342*	1648	W14 X233*	1483	W14 X233*	1197	W14 X342*	1538	W14 X257*	970	W14 X283*	1087	W14 X370*	2106	W14 X233*	1130	W14 X233*	1164	W14 X426*	2813	W14 X342*	1982	W14 X311*	1612
35TH FL.	12'-9"		1807		1570		1308		1668		1043		1160		2258		1324		1279		3002		2124		1746
34TH FL.	12'-9"	W14 X370*	1968	W14 X257*	1657	W14 X283*	1418	W14 X398*	1832	W14 X311*	1135	W14 X342*	1295	W14 X426*	2452	W14 X283*	1440	W14 X283*	1398	W14 X455*	3242	W14 X398*	2288	W14 X370*	1902
33RD FL.	12'-9"		2099		1727		1506		1963		1208		1388		2605		1534		1494		3430		2434		2036
32ND FL.	12'-9"	W14 X398*	2230	W14 X283*	1798	W14 X311*	1594	W14 X455*	2094	W14 X370*	1280	W14 X370*	1481	W14 X455*	2758	W14 X342*	1628	W14 X342*	1589	W14 X500*	3619	W14 X455*	2570	W14 X426*	2171
31ST FL.	12'-9"		2361		1868		1682		2245		1353		1573		2912		1721		1684		3807		2707		2305
30TH FL.	12'-9"	W14 X426*	2491	W14 X311*	1939	W14 X342*	1770	W14 X500*	2355	W14 X398*	1425	W14 X398*	1666	W14 X500*	3066	W14 X370*	1815	W14 X370*	1780	W14 X500*	3996	W14 X500*	2844	W14 X455*	2440
29TH FL.	12'-9"		2624		2090		1939		2486		1498		1758		3219		1908		1878		4184		2980		2574
28TH FL.	12'-9"	W14 X455*	2755	W14 X342*	2151	W14 X370*	2018	W14 X550*	2617	W14 X426*	1570	W14 X426*	1852	W14 X550*	3373	W14 X398*	2003	W14 X398*	1970	W14 X605*	4372	W14 X550*	3166	W14 X500*	2709
27TH FL.	12'-9"		2886		2213		2097		2747		1643		1945		3526		2097		2065		4561		3253		2843
26TH FL.	12'-9"	W14 X500*	3016	W14 X370*	2274	W14 X398*	2178	W14 X605*	2878	W14 X455*	1715	W14 X455*	2037	W14 X605*	3680	W14 X426*	2190	W14 X426*	2160	W14 X665*	4750	W14 X605*	3390	W14 X550*	2978
25TH FL.	12'-9"		3147		2336		2255		3005		1788		2130		3833		2284		2256		4938		3526		3112
24TH FL.	12'-9"	W14 X550*	3278	W14 X398*	2397	W14 X426*	2334	W14 X665*	3130	W14 X500*	1860	W14 X500*	2203	W14 X665*	3987	W14 X455*	2378	W14 X455*	2351	W14 X730*	5167	W14 X665*	3663	W14 X605*	3247
23RD FL.	14'-9"		3409		2485		2413		3273		1943		2316		4140		2472		2446		5315		3798		3381
			3588		2680		2585		3460		2183		2437		4350		2597		2574		5872		3985		3565
FLOOR / COL. NO.		E 70	N	E 71	N	E 72	N	E 73	N	E 74	N	E 75	N	E 76	N	E 77	N	E 78	N	E 79	N	E 80	N	E 81	N

△3

NOTES:

1. LEGEND E- INDICATES EXISTING COLUMNS.
   N- INDICATES NEW COLUMN OR COLUMN REINFORCING
2. ALL NEW COVER PLATES SHALL BE A572-GRADE 50
3. FOR GENERAL NOTES & TYPICAL DETAILS SEE DRAWINGS S-32 & S-33
4. ALL COLUMN LOADS ARE SERVICE LOADS IN KIPS.



TYPICAL SIDE PLATE REINFORCING DETAIL

NOTE:
1. - REMOVE EXIST. CONNECTIONS AT 39, 41 & 43RD FL.'S AS REQ'D.
2. - EXTEND COLUMN REINF. AS CLOSE AS POSSIBLE TO THE UNDERSIDE OF EXIST. BEAM AND / OR TOP OF EXIST. SLAB.
3. AT SPLICE LOCATIONS CUT REINFORCING PLATE AS REQUIRED & EXTEND MINIMUM 18" INTO COLUMN BELOW WELD CONT. AS SHOWN ABOVE.

△1

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
3	5/22/89	REVISED AS CIRCLED
2	3/1/89	REVISED AS CIRCLED
1	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
	11/21/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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COLUMN SCHEDULE #6

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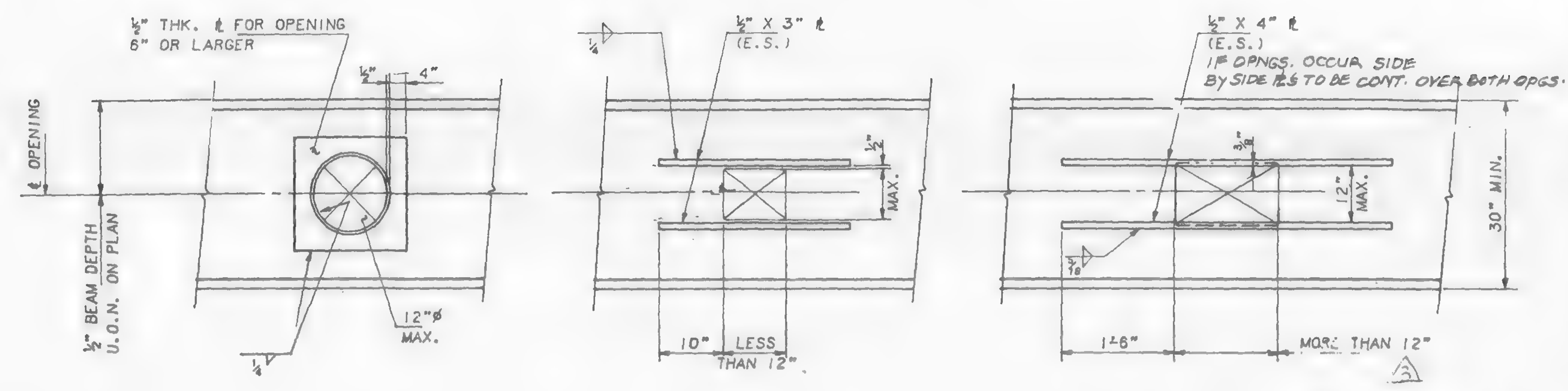
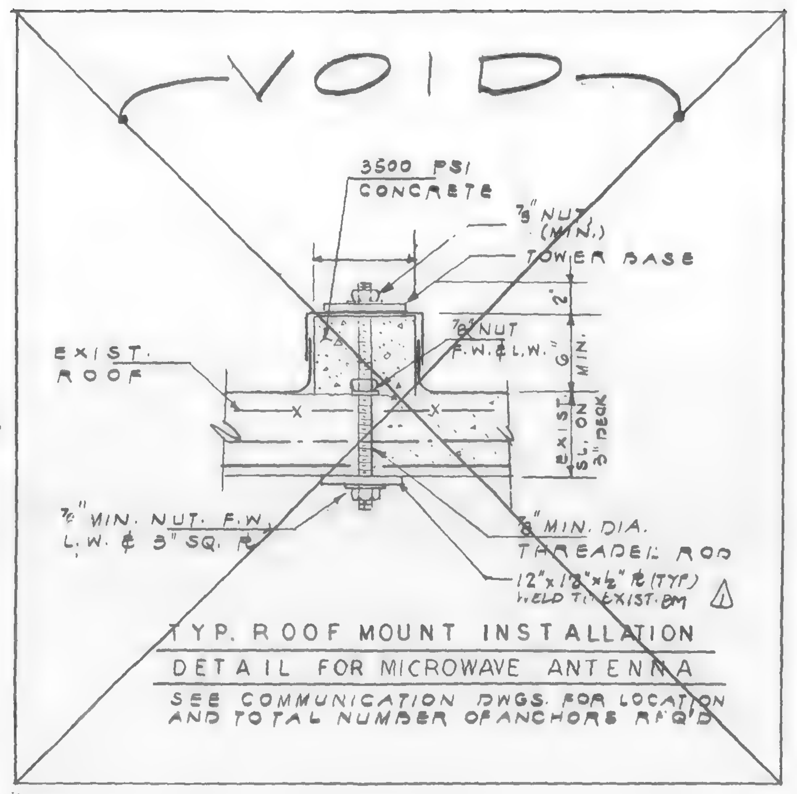
Project No.:
Date:
Scale:
Sheet No. S-31



TYP BEAM OPENING DETAILS

REINF. ℄'S TO BE SAME GRADE OF STEEL AS BEAM (TYP.)



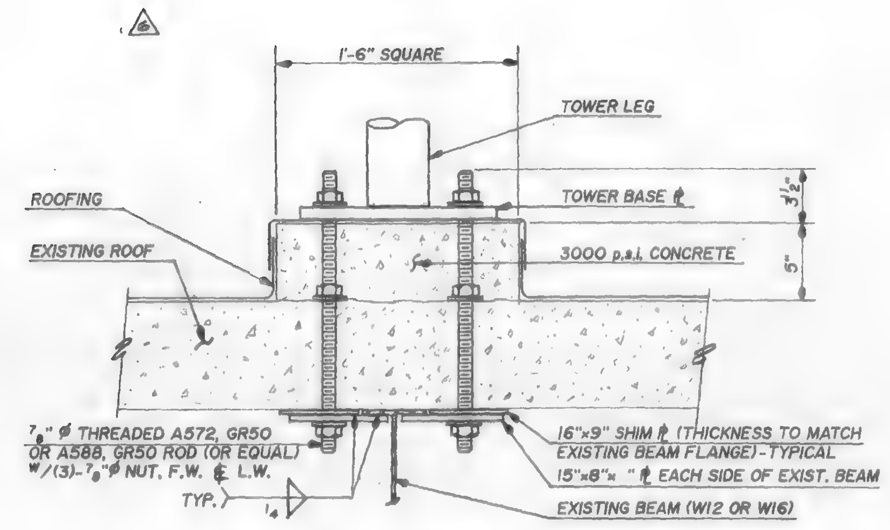
TYPICAL BEAM OPENING DETAILS

1. REINF. PL'S TO BE SAME GRADE OF STEEL AS BEAM (TYP.).
2. ALL FIELD CUT OPENINGS SHALL BE REINF. AS PER DETAILS SHOWN ABOVE, UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
3. DURING ALL FIELD CUTTING OF PENETRATIONS THRU BEAMS THE TEMPERATURE SHALL NOT EXCEED 600 DEGREES F AS MEASURED BY THE THERMOCOUPLES 6" FROM EDGE OF OPENING. @ FOUR CORNERS OF EACH OPENING.
4. NEW REINF. SHALL BE IN PLACE BEFORE CUTTING OPENING IN BEAM WEB.

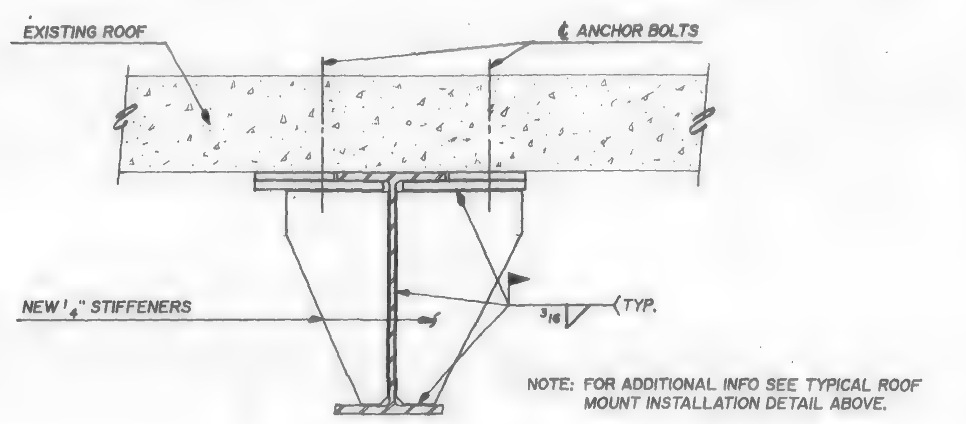
(CONTINUED):

19. WELD MINIMUM 2-⅜" FITTED STIFFENERS TO EXISTING BEAM SUPPORTING NEW STAIR HANGERS WHERE HANGERS ARE ECCENTRIC WITH RESPECT TO BEAM CENTER LINE.

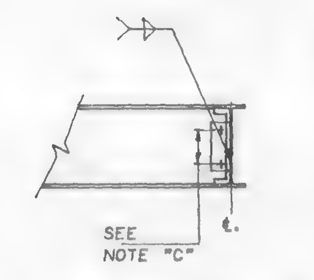
20. SHORE EXISTING BEAM WHERE FITTED STIFFENERS ARE WELDED TO EXISTING BEAMS.



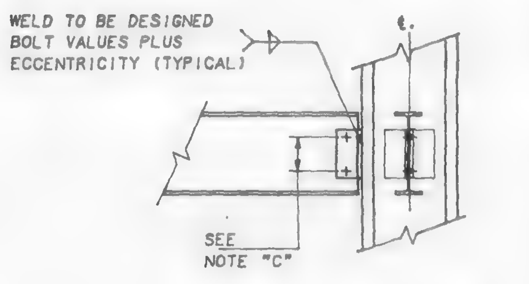
TYPICAL ROOF MOUNT INSTALLATION DETAIL FOR MICROWAVE ANTENNA



TYPICAL STIFFENED DETAIL AT MICROWAVE ANTENNA STEEL SUPPORT



BEAM TO BEAM CONNECTION

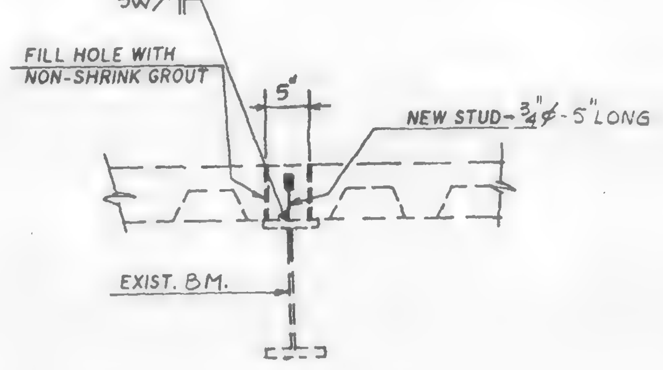


BEAM TO COL. CONNECTION

MIN. NO. OF BOLTS "N" SEE NOTE "C"	
BEAM SIZE *	"N"
W36	10
W33	9
W30	8
W27	7
W24	7
W21	6
W18	5
W16	4
W14	3
W12	3

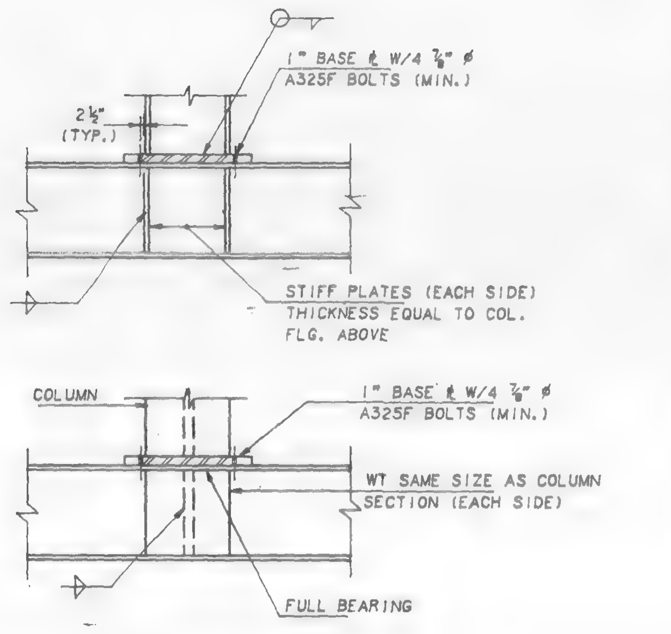
NOTES:

1. SHEAR CONNECTION MUST BE DESIGNED FOR THE GREATEST OF THE FOLLOWING:
   A. FOR COMPOSITE BEAMS - REACTIONS FROM AISC BEAM TABLE X 2.0 AT BEAMS F_y=50 ksi X 1.5 AT BEAMS F_y=36 ksi
   B. FOR NON-COMPOSITE BEAMS - REACTIONS FROM AISC BEAM TABLE X 1.5 AT BEAMS F_y=50ksi X 1.3 AT BEAMS F_y=36ksi
   C. MINIMUM SHEAR CONNECTIONS - SEE TABLE
   D. REACTIONS INDICATED ON DRAWINGS.
2. BOLTS SHALL BE ¾" ø A325 FRICTION TYPE BOLTS MINIMUM (U.O.N.)
3. PROVIDE WEB REINFORCING WHERE REQUIRED DUE TO WEB CUT FOR CONNECTIONS.

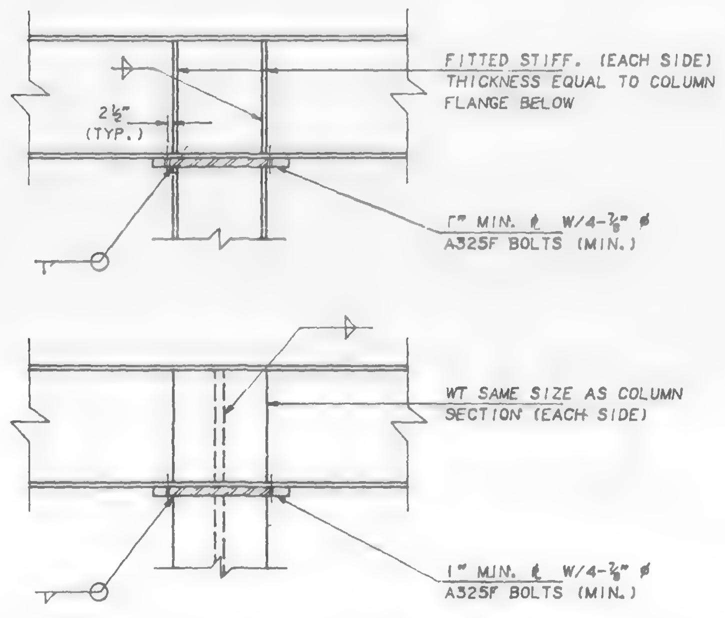


TYPICAL REINFORCING DETAIL OF EXIST. GIRDER OR BEAM

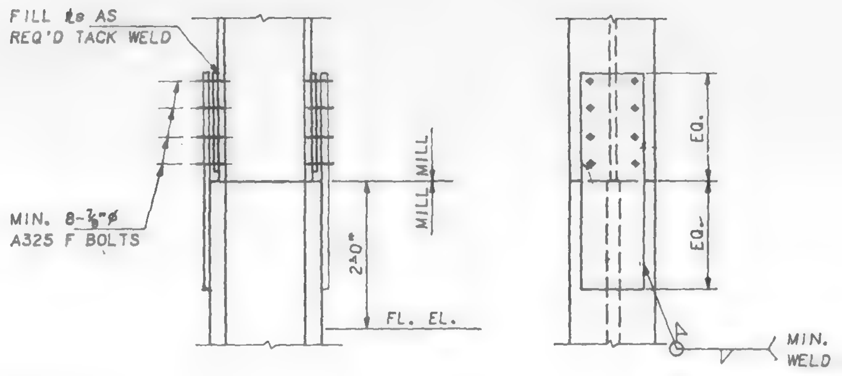
TYPICAL SHEAR CONNECTION DETAILS



TYPICAL DETAIL FOR COLUMN OR POST PICK-UP



TYPICAL DETAIL FOR BEAM OVER COLUMN



TYPICAL COLUMN SPLICE DETAIL

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL BE ASTM A36 HAVING A MINIMUM YIELD POINT OF 36,000 PSI OR A572 GRADE 50 (SEE PLAN NOTES).
2. AISC SPECIFICATIONS FOR "DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL" - LATEST EDITION SHALL APPLY, EXCEPT AS MODIFIED BY THE NOTES, SCHEDULES AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS.
3. WELDING ELECTRODES SHALL CONFORM TO E70XX ELECTRODES.
4. ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS.
5. ALL WELDED CONNECTIONS SHALL CONFORM TO THE RECOMMENDATIONS OF AWS D1.1 AND THE NEW YORK CITY BUILDING CODE. PROVISIONS SHALL BE MADE FOR FIELD INSPECTION AND TESTING OF WELDS. ALL SHOP WELDS SHALL BE TESTED BY ANY OF THE APPROVED METHODS AND SHALL BE CERTIFIED.
6. ALL STEEL BOLTS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS, LATEST EDITION: HIGH STRENGTH BOLTS A-325 AND UNFINISHED BOLTS A-307.
7. ALL BOLTS SHALL BE 3/4" DIAMETER MINIMUM ON HOLES 13/16" DIAMETER UNLESS OTHERWISE NOTED.
8. ALL SHOP CONNECTIONS SHALL BE WELDED.
9. ALL COLUMN SPLICES, CONNECTIONS OF BEAMS TO COLUMNS, CONNECTIONS WITHIN 3 FEET OF COLUMNS AND CONNECTIONS OF BEAMS CARRYING MACHINE LOADS SHALL BE HIGH STRENGTH BOLTED AND WELDED IN THE FIELD. OTHER FIELD CONNECTIONS MAY USE UNFINISHED BOLTS EXCEPT WHERE SPECIFICALLY SHOWN OTHERWISE IN STRUCTURAL DRAWINGS. FIELD CONNECTIONS OF NEW CONSTRUCTION TO EXISTING CONSTRUCTION SHALL BE WELDED.
10. IN ADDITION TO MOMENT CONNECTIONS, PROVIDE MINIMUM SHEAR CONNECTIONS FOR ALL GRAVITY LOADS AS SHOWN ON TYPICAL SHEAR CONNECTION DETAILS.
11. ALL ENDS OF COLUMNS AT SPLICES AND AT OTHER BEARING CONNECTIONS SHALL BE MILLED TO COMPLETE TRUE BEARING.
12. MILLED STIFFENERS SHALL BE PROVIDED UNDER ALL COLUMN CONNECTIONS AND OVER ALL COLUMNS.
13. PROVISIONS SHALL BE MADE FOR CONNECTIONS OF OTHER TRADES INCLUDING CUTTING AND PUNCHING OF STRUCTURAL MEMBERS, WHERE REQUIRED BY THE DRAWINGS, OR FOR WHICH INFORMATION IS FURNISHED PRIOR TO FABRICATION.
14. THE USE OF CUTTING TORCH IN THE FIELD WILL BE PERMITTED ONLY AFTER SECURING ENGINEER'S APPROVAL.
15. CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING REQUIRED TO MAINTAIN PLUMBNESS AND STABILITY DURING ERECTION.
16. CONTRACTOR SHALL PROVIDE STIFFENERS PER SECTION 1.15.5 OF AISC SPECIFICATIONS REGARDING THE NEED FOR COLUMN STIFFENERS.
17. ALL WELDERS TO BE LICENSED BY THE CITY OF NEW YORK.
18. FOR PAINTING OF STRUCTURAL STEEL SEE SPECIFICATIONS.

STEEL DECK NOTES:

1. STEEL DECK SHALL CONFORM TO THE CURRENT SPECIFICATIONS FOR THE DESIGN OF LIGHT GAUGE COLD FORMED STEEL STRUCTURAL MEMBERS PER AISI.
2. DECK SHALL BE ANCHORED BY WELDING THROUGH THE BOTTOM OF THE RIB TO STRUCTURAL STEEL AT MAXIMUM SPACINGS OF 12" WITH MINIMUM BEARING OR END LAP OF 2".
3. OPENING IN DECK SHALL BE TREATED AS FOLLOWS:
   A. FOR HOLES 6" OR LESS, PERPENDICULAR TO SPAN. NO REINFORCING REQUIRED.
   B. FOR HOLES OVER 6" BUT NOT MORE THAN 10". PROVIDE ONE 14 GAUGE REINFORCING PLATE 24" X 24" AND WELD IN PLACE.
   C. ALL OTHER OPENINGS TO BE FRAMED AS SHOWN ON PLAN.
4. STEEL DECK SHALL BE AS NOTED ON FRAMING PLAN.

SUPERSTRUCTURE CONCRETE NOTES:

1. ALL CONCRETE OVER METAL DECK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS U.O.N.
2. ALL CONCRETE IS TO COMPLY WITH ALL REQUIREMENTS OF CURRENT ACI CODE AND ALL OTHER RELEVANT SECTIONS OF THE NEW YORK CITY BUILDING CODE.
   A. PRELIMINARY TESTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND THE PORT AUTHORITY FOR REVIEW. NO CONCRETE SHALL BE PLACED BEFORE SUCH REVIEW HAS BEEN COMPLETED.
   B. LABORATORY TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND THE PORT AUTHORITY.
3. CONTRACTOR SHALL VERIFY DIMENSIONS AND LOCATIONS OF ALL OPENINGS, PIPE SLEEVES, ANCHOR BOLTS, ETC., AS REQUIRED BY ALL TRADES BEFORE CONCRETE IS PLACE.
4. ALL STRUCTURAL DRAWINGS SHALL BE WORKED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND ANY DISCREPANCIES SHALL BE COORDINATED WITH THE ARCHITECT.
5. NO DEVIATION FROM THE STRUCTURAL PLANS SHALL BE PERMITTED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE STRUCTURAL ENGINEER. ALL REINFORCING DETAILS TO BE SUBMITTED TO THE ENGINEER FOR HIS APPROVAL.
6. TRANSPORTING, PLACING, CURING AND DEPOSITING CONCRETE SHALL COMPLY WITH THE NEW YORK CITY BUILDING CODE AND THE ACI BUILDING CODE.

GENERAL NOTE:

CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS. THIS VERIFICATION SHALL INCLUDE A SURVEY BY A LICENSED SURVEYOR AND FIELD INVESTIGATIONS TO DETERMINE THE LOCATIONS AND ELEVATIONS OF THE EXISTING STRUCTURAL STEEL. THE LOCATION AND ELEVATIONS OF EXISTING SLABS SHALL ALSO BE VERIFIED. THE CONTRACTOR SHALL SUBMIT A WRITTEN REPORT AND SURVEY TO THE ENGINEER FOR HIS REVIEW AND/OR INSTRUCTIONS OF ACTUAL FIELD CONDITIONS WHICH MAY VARY FROM INFORMATION INDICATED ON THE DRAWINGS. THESE REPORTS WILL ALSO INCLUDE EXISTING CONDITIONS NOT SHOWN ON THE DRAWINGS WHICH MAY REQUIRE A REVISION OF THE INFORMATION ON THE DRAWINGS.

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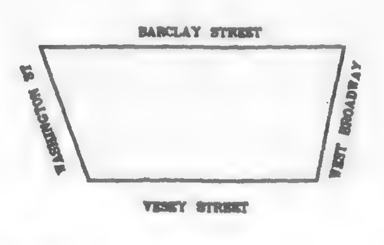
7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048



KEY PLAN

NOTES

LEGEND

No.	Date	Revision
	6.9.95	AS BUILT — REF. REV. 6/11.5.93
	8/23/94	ISSUED FOR TENANT ALTERAT.
	7/22/94	RESPONSE TO P.A. COMMENTS
8	5/25/94	RESPONSE TO P.A. COMM.TS
7	4/6/94	REVISED AS CIRCLED
6	11/8/93	REVISED AS CIRCLED
5	10/4/93	CHILLED WATER LINE RELOCATION
4	6/2/93	ISSUED FOR ADDENDUM No. 1
3	5/21/93	ISSUED FOR TENANT ALTERATIONS
2	4/6/89	REVISED AS CIRCLED
1	3/1/89	REVISED, AS CIRCLED
	1/3/89	ISSUED FOR CONST.
	12/19/88	SUBMITTED TO P.A.
	11/21/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG. MODIFICATIONS
	10/31/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG. MODIFICATIONS
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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TYPICAL SUPERSTRUCTURE DETAILS & GENERAL NOTES

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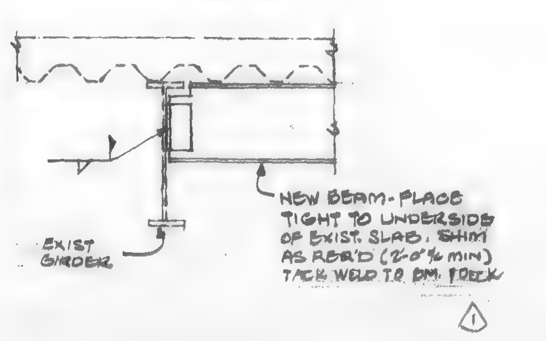
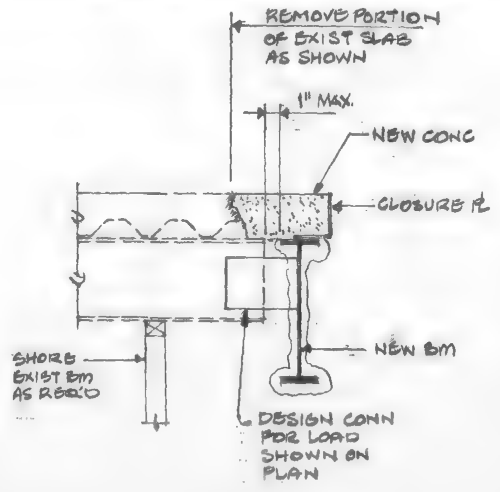
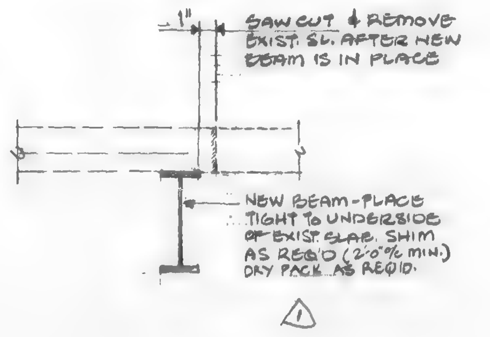
Project No:
Date:
Scale:
Sheet No. S-32



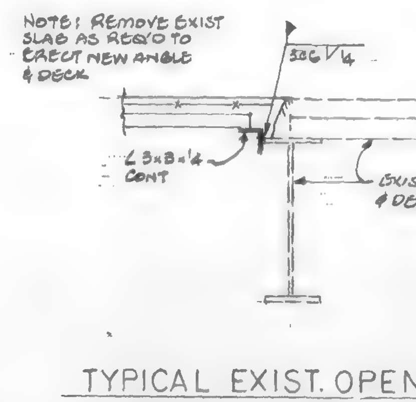
TYPICAL NEW BEAM TO EXIST. BEAM CONN. DETAIL



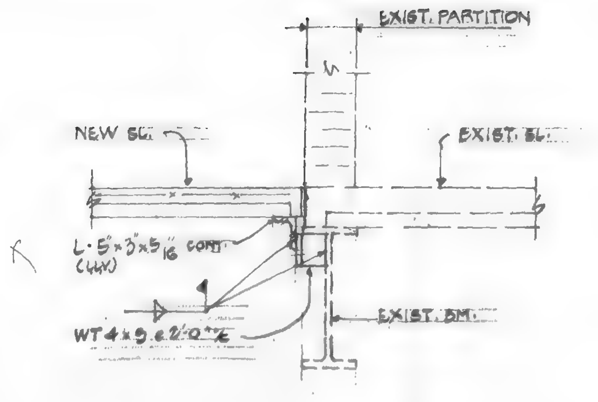
TYPICAL EXIST. BEAM TO NEW BEAM CONN. DETAIL



TYPICAL SLAB EDGE AT NEW OPNG. DETAIL

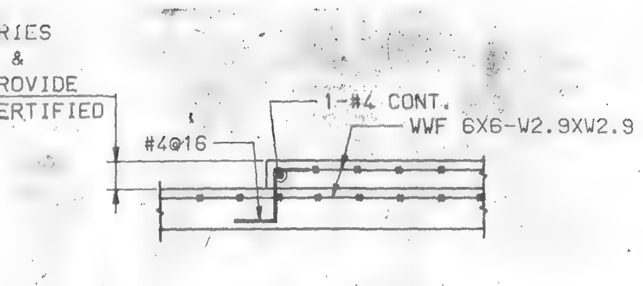


TYPICAL EXIST. OPENING CLOSURE DETAIL
(FOR DECK ORIENTATION SEE PLAN)

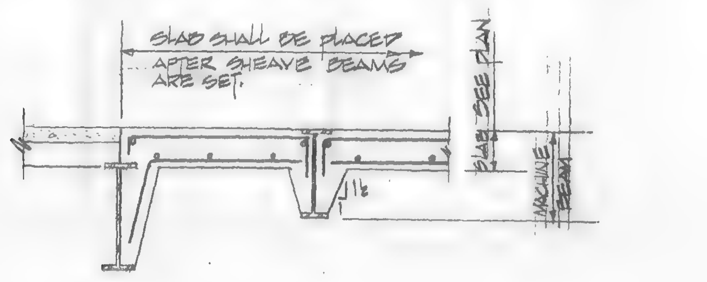


TYPICAL EXIST. OPENING DETAIL WHERE EXIST PARTITIONS REMAIN
(FOR DECK ORIENTATION SEE PLAN)

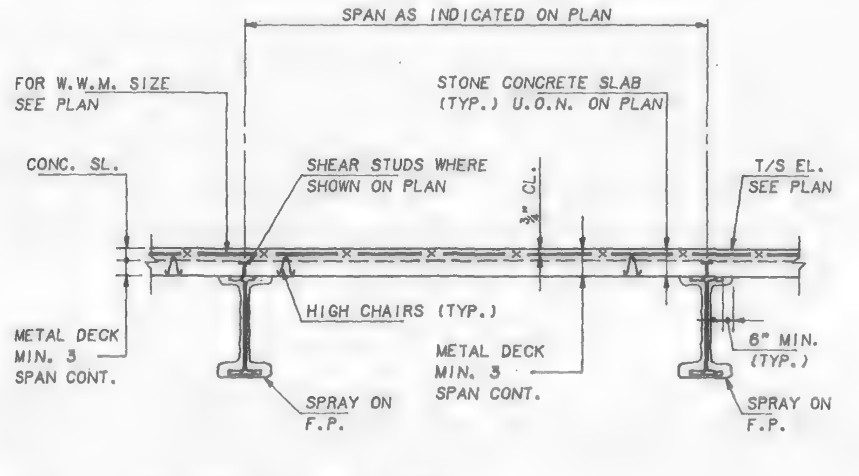
PAD THICKNESS VARIES
SEE MECH. ELEC. &
PLUMBING DWGS. PROVIDE
ANCHORS AS PER CERTIFIED
SHOP DRAWINGS



TYP. DETAIL OF EQUIPMENT PAD ON SLAB

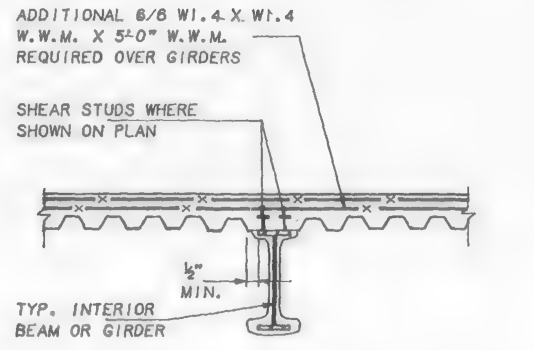


TYP. MACH. ROOM SLAB DET.

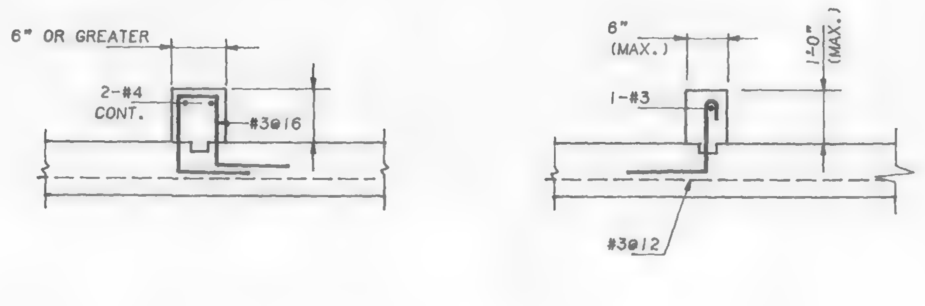


NOTE: ALL SINGLE SPAN DECK MUST BE SHORED.

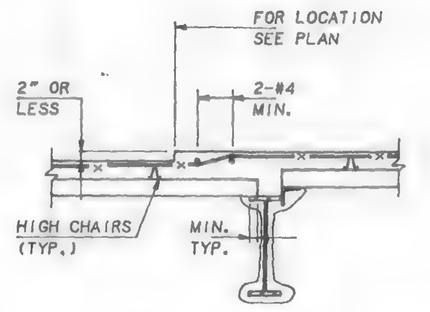
TYPICAL FLOOR DETAIL



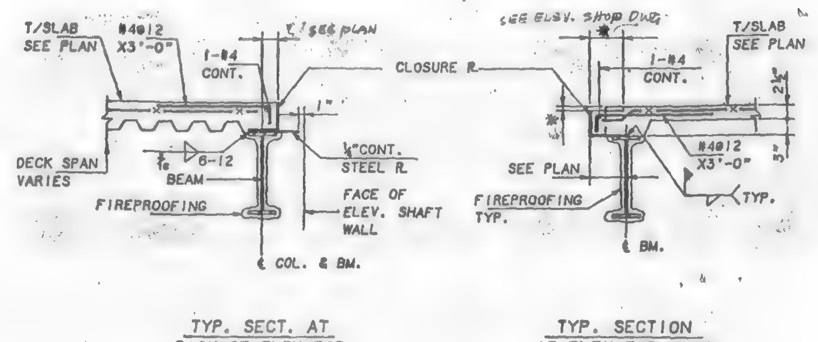
DETAILS PERPENDICULAR TO FLOOR SPAN



TYPICAL CONCRETE CURB DETAILS
NOTE: FOR LOCATION SEE ARCH. DWGS

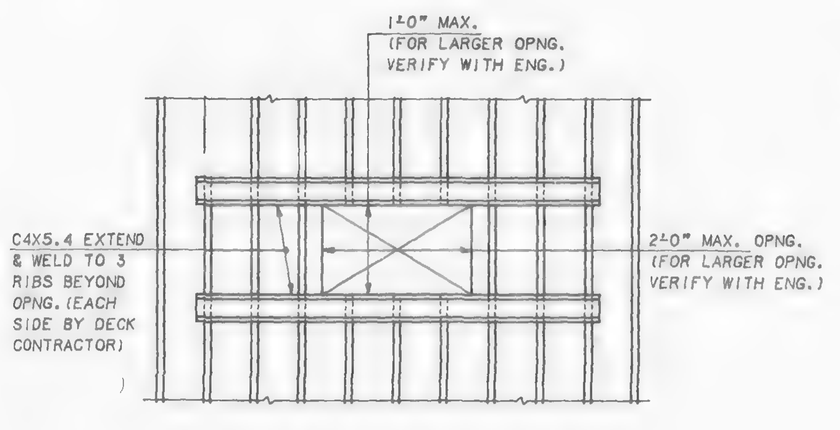


TYP. DROP IN SLAB DETAIL



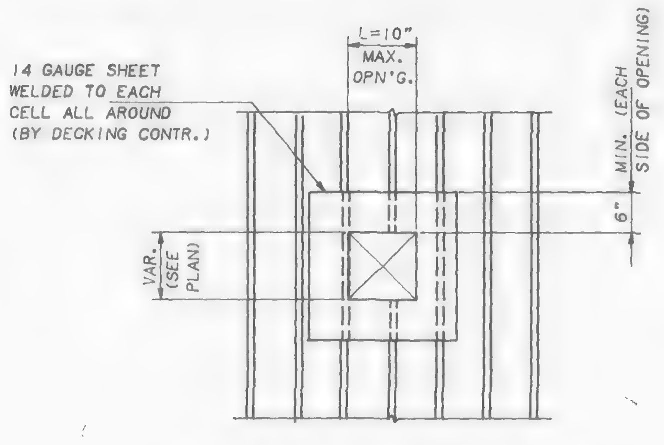
TYP. SECT. AT BACK OF ELEVATOR

TYP. SECTION AT ELEVATOR DOOR



NO REINF. REQUIRED FOR HOLES 6" ⌀ OR LESS
PROVIDE CONCRETE STOP AT ALL OPENINGS

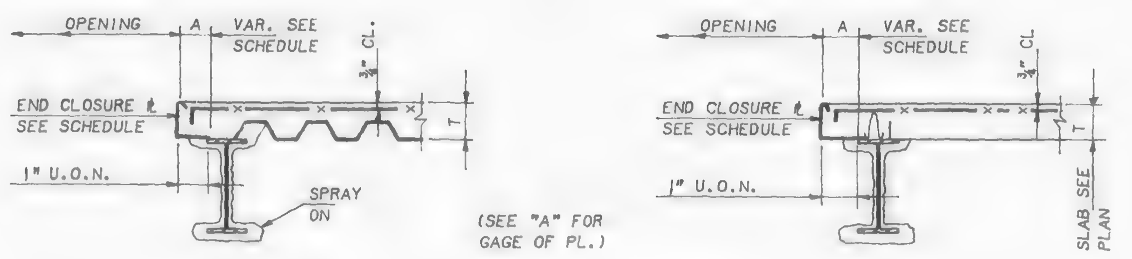
FOR OPENINGS TO 2'-0" PERPENDICULAR TO DECK



NO REINF. REQUIRED WHERE "L" IS 6" OR LESS IN DIRECTION PERPENDICULAR TO DECK

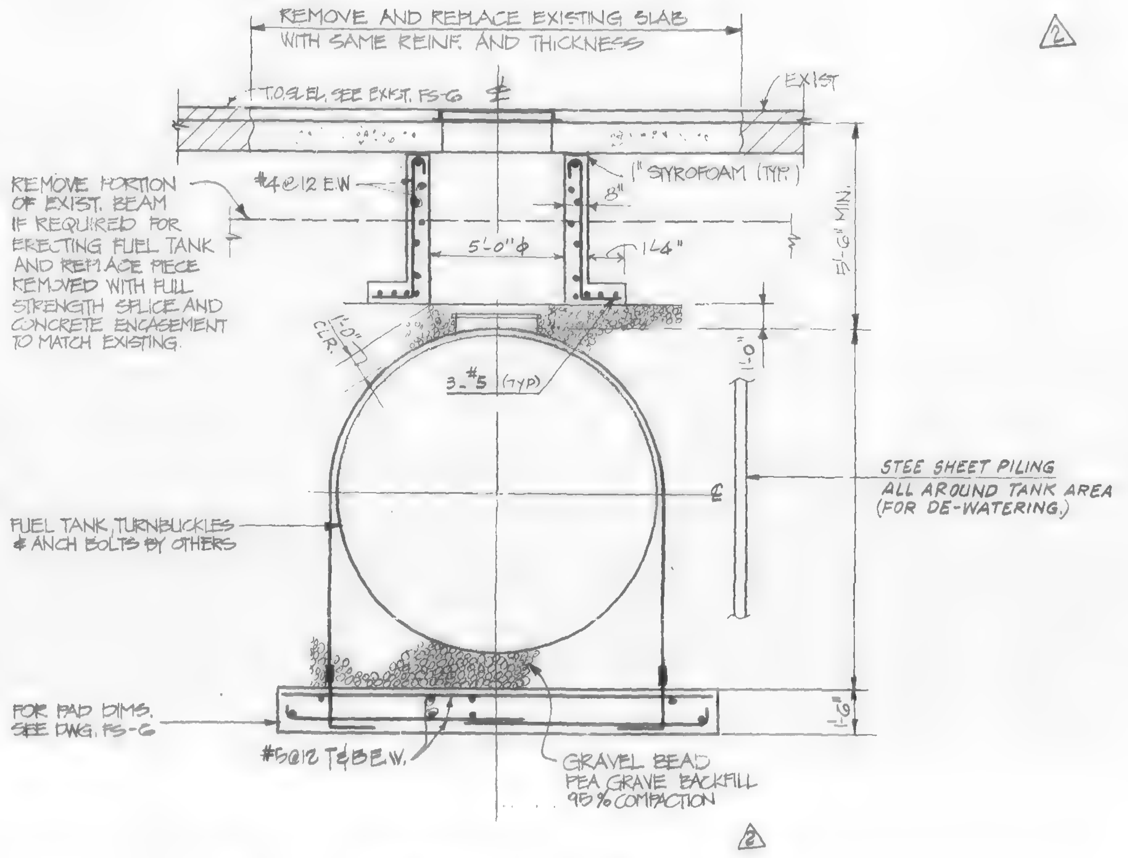
FOR OPENINGS TO 10" PERPENDICULAR TO DECK

TYPICAL FLOOR DETAILS AT OPENINGS

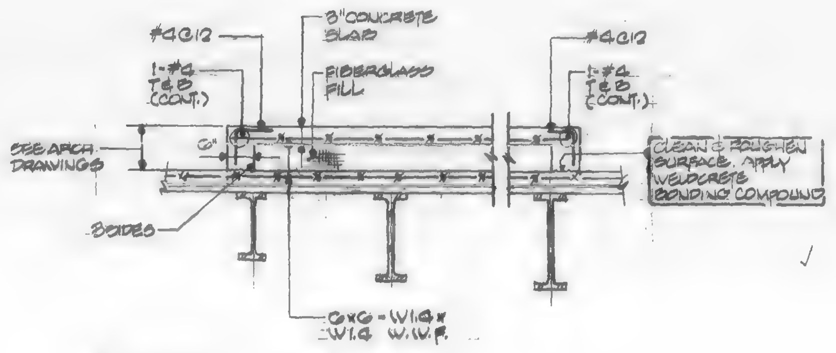


TYPICAL DETAILS OF BEAMS AT OPENING

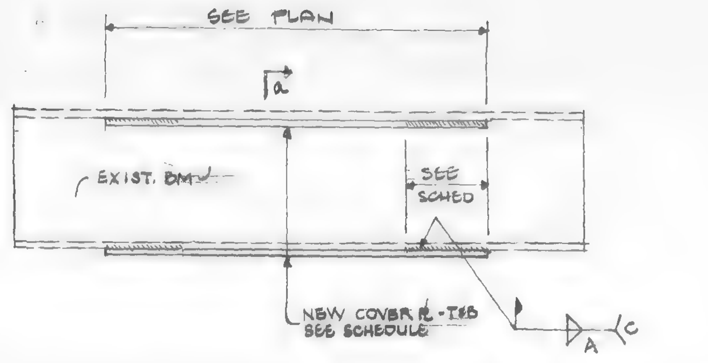
T=5½"		T=8"		REMARKS
A	GAGE OF PLATE	A	GAGE OF PLATE	
UP TO 4"	14	UP TO 3½"	12	
4" TO 8"	12	4" TO 7"	10	
8" TO 10"	10			



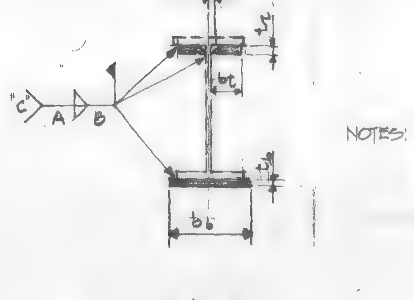
TYP. SECTION @ NEW FUEL TANK
(@ 1ST FLOOR LOADING DOCK- FOR LOCATION SEE MECH. AND ARCH. DWG'S)



RAISED SLAB DETAIL



TYPICAL COVER PLATE REINF. DETAIL

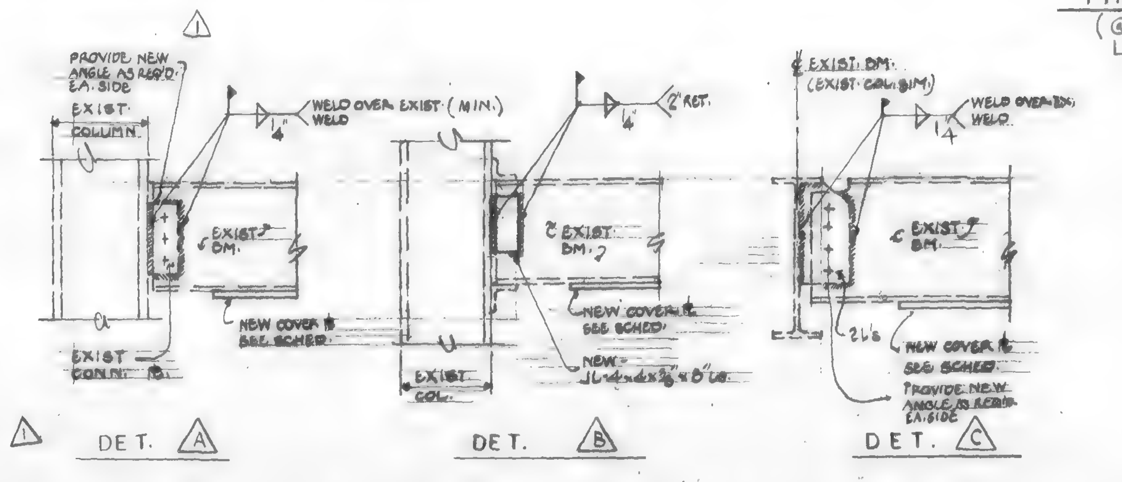


NOTES: ALL NEW PLATES TO BE Fy=50KSI UNLESS OTHERWISE SHOWN ON PLAN.

SECT "a-a"

NEW COVER PL SHEDULE

MARK	BOTTOM FLANGE $b_b \times t_b$	TOP FLANGE $2-b_t \times t_t$	FILLET WELD "A"	INTERMITTENT WELD SPACING "B"	CONT. TERMINATION WELD AT EACH END "C"	REMARKS
CP1	8×1½	2-2¾×1	¼	6@12	1'-6"	
CP2	8×1¼	2-2¾×1	¼	6@12	1'-6"	
CP3	8×1	2-2¾×1	¼	6@12	1'-6"	
CP4	8×¾	—	¼	6@12	1'-4"	
CP5	5×½	—	¼	6@12	1'-0"	
CP6	5×1	—	¼	6@12.	1'-0"	
CP7	11×½	2-2¾×1	¼	6@12	1'-10"	
CP8	8×½	—	¼	6@12	1'-4"	
CP9	7×½	—	¼	6@12	1'-2"	
CP10	11×2	2-3½×1½	5/16	6@12	1'-10"	
CP11	12×1½	2-4×2	5/16	6@12	2'-0"	
CP12	12×1½	2-4×2	5/16	6@12	2'-0"	
CP13	6×¾	—	¼	6@12	1'-0"	
CP14	11×¾	—	¼	6@12	1'-6"	
CP15	12×¾	—	¼	6@12	2'-0"	
CP16	18×1	—	5/16	6@12	3'-0"	
CP17	7×⅜	—	¼	6@12	1'-2"	
CP18	10×1¼	2-2¾×1¼	5/16	6@12	1'-8"	
CP19	10×1½	2-2¾×1¼	5/16	6@12	1'-8"	
CP20	8×1	2-2¾×1	5/16	6@12	1'-8"	
CP21	14×1½	—	5/16	6@12	2'-4"	
CP22	14×1¼	2-2¾×1¼	5/16	6@12	2'-4"	
CP23	14×1½	—	5/16	6@12	2'-4"	Fy=36ksi
CP24	10×1	—	5/16	6@12	1'-8"	
CP25	7½×1	2-2×1¼	5/16	CONT.	1'-3"	
CP26	6×¾	2-1½×¾	5/16	6@12	1'-0"	
CP27	14×1½	2-4×2	5/16	6@12	2'-4"	



DET. A DET. B DET. C

TYPICAL EXIST. CONNECTION REINF. DETAILS AT COVER PLATED BEAMS

1. CONNECTION REINFORCEMENT TO BE DESIGNED BASED ON LRFD HAND BOOK FOR ULTIMATE LOAD AS SHOWN ON PLAN OR MINIMUM AS SHOWN ON DETAIL.
2. ADD ADDITIONAL ANGLES OR PLATE AS REQ'D TO REINFORCE CONNECTION

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

BARCLAY STREET / WEST BROADWAY / VESEY STREET
KEY PLAN

NOTES

LEGEND

No.	Date	Revision
4	8-10-89	ISSUED FOR FIELD SKETCH
3	5-22-89	REVISED AS CIRCLED
2	4/6/89	REVISED AS CIRCLED
1	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
	12/17/88	SUBMITTED TO P.A.
	11/21/88	ISSUED TO PORT AUTHORITY FOR APPROVAL OF BASIC BUILDING MODIFICATIONS
	10/31/88	ISSUED TO PORT AUTHORITY FOR APPROVAL OF BASIC BUILDING MODIFICATIONS
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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MEMBER OF THE SEINUK GROUP

SUPERSTRUCTURE
SECTIONS #1

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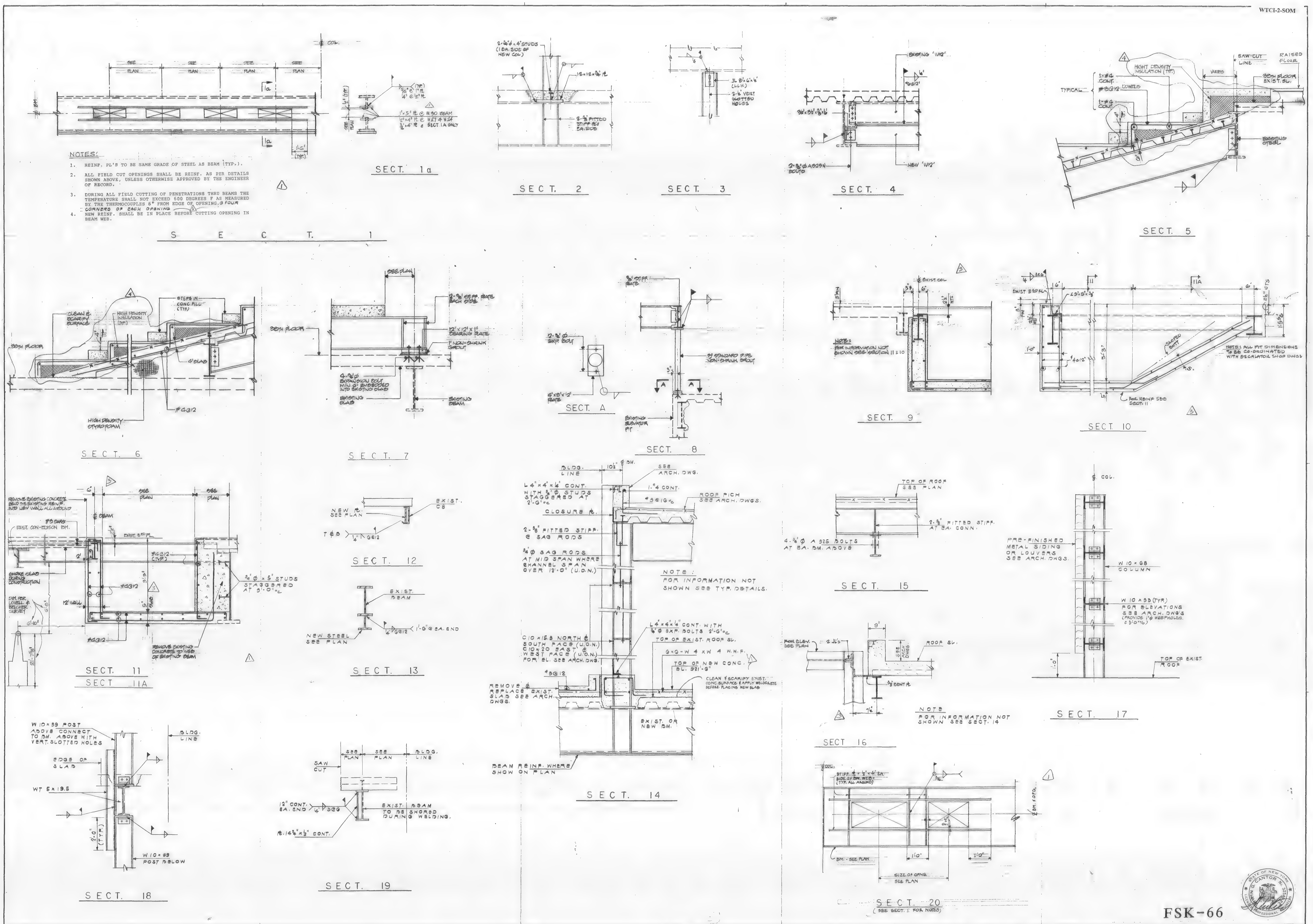

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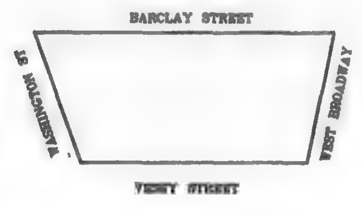

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
4	8-10-89	ISSUED FOR FIELD SKETCH
3	5-22-89	REVISED AS CIRCLED
2	4/6/89	REVISED AS CIRCLED
1	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
	12/17/88	SUBMITTED TO P.A.
	11/21/88	[illegible]
	10/31/88	[illegible]
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATION

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SUPERSTRUCTURE SECTIONS #1

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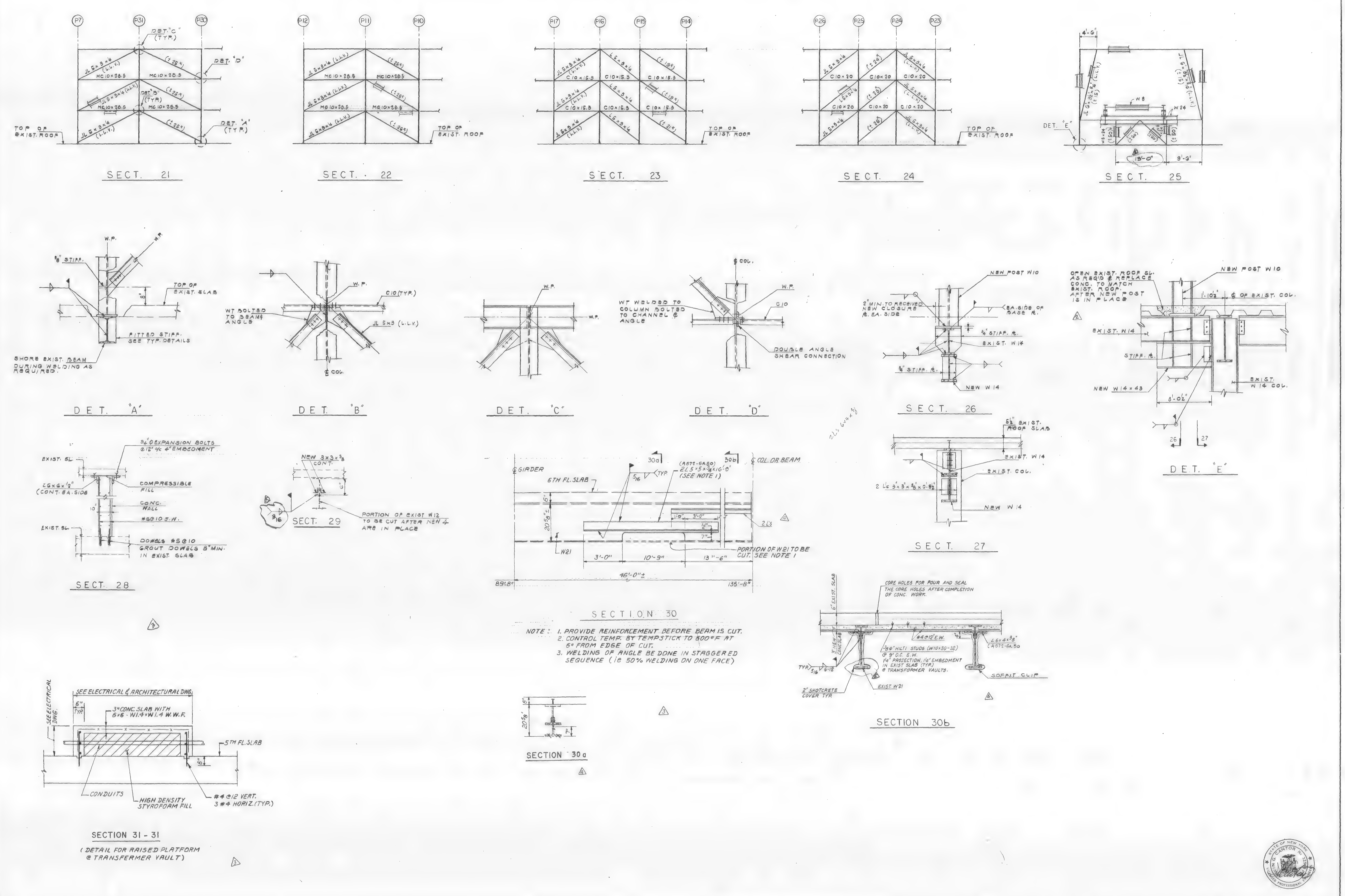

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NEW YORK, NEW YORK 10048

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
5	8/18/89	REVISED AS CIRCLED
4	3-22-89	REVISED AS CIRCLED
3	4-6-89	REVISED AS CIRCLED
	4-4-89	ISSUED FOR CON EDISON APPROVAL
2	1/26/89	REVISED AS CIRCLED
	1/9/89	ISSUED FOR CONST.
1	12/16/88	

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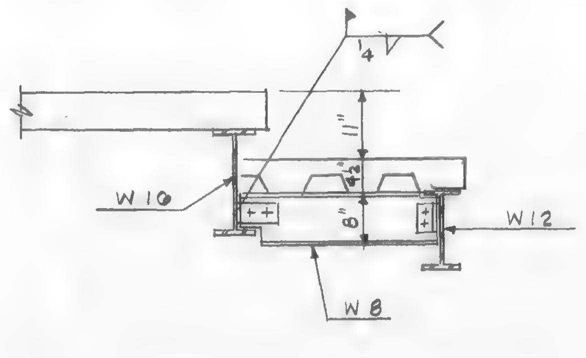
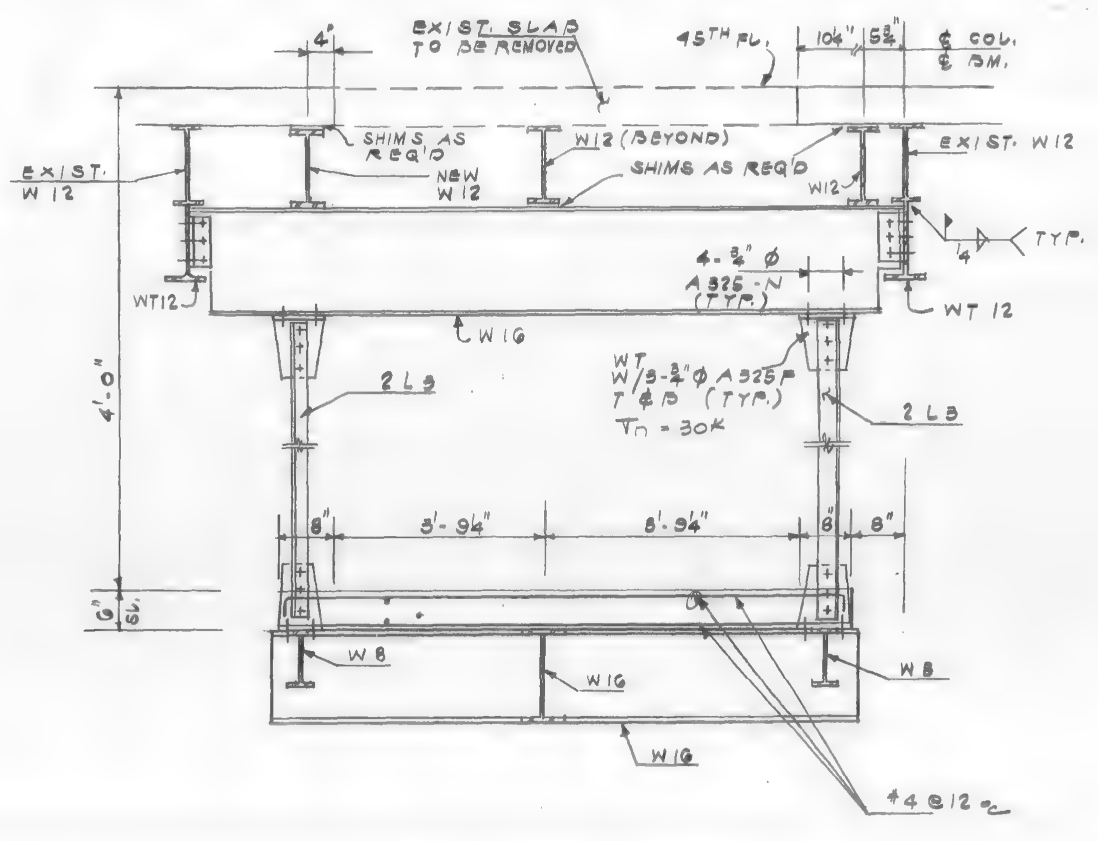


SECT. 32
(SECTION AT 41 & 43RD FL. BALCONY)



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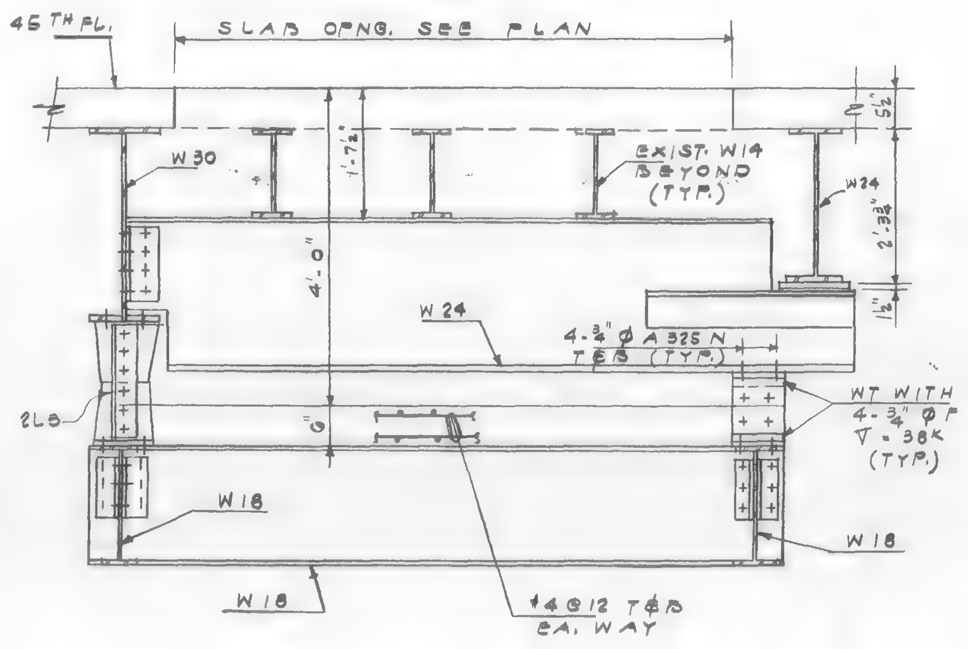

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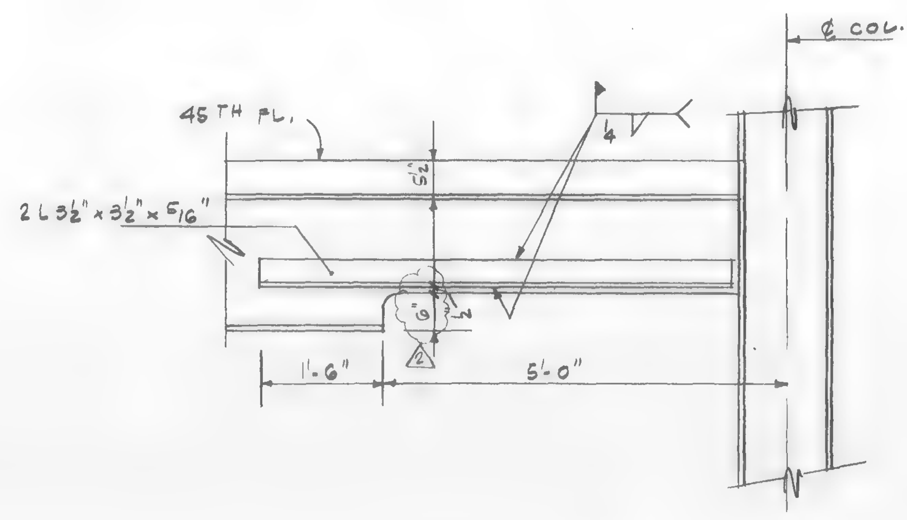

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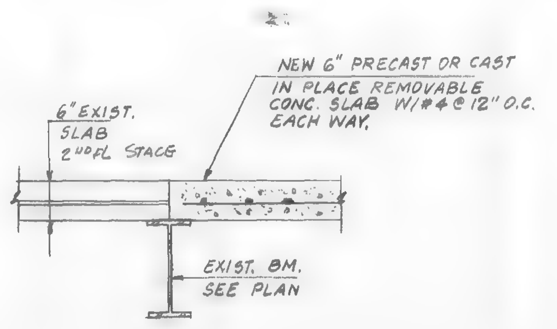

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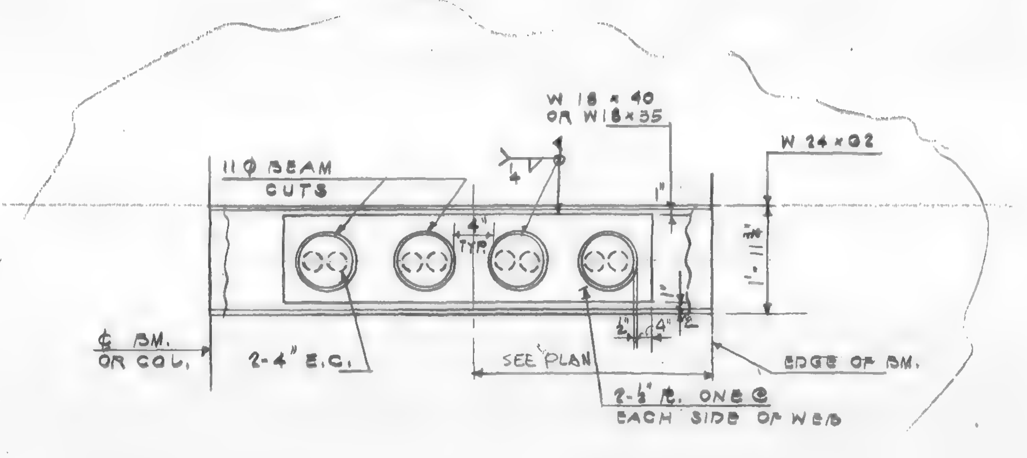

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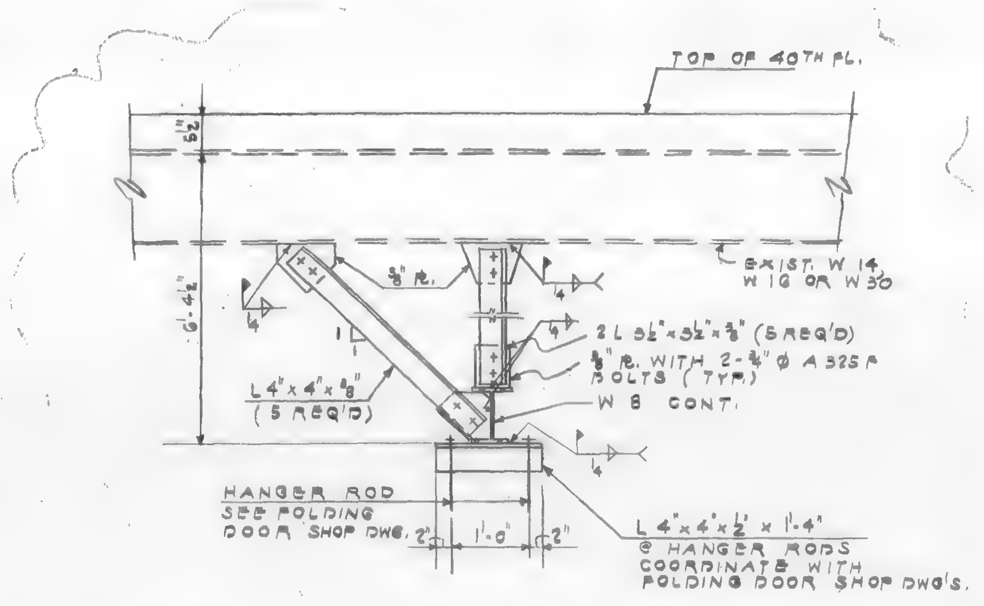

SECT. 38

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
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BARCLAY STREET
VESEY STREET
WEST BROADWAY

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
3	3/30/90	REVISED AS CIRCLED
2	8/18/89	REVISED AS CIRCLED
1	5-22-89	REVISED AS CIRCLED
—	4-6-89	

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SUPERSTRUCTURE
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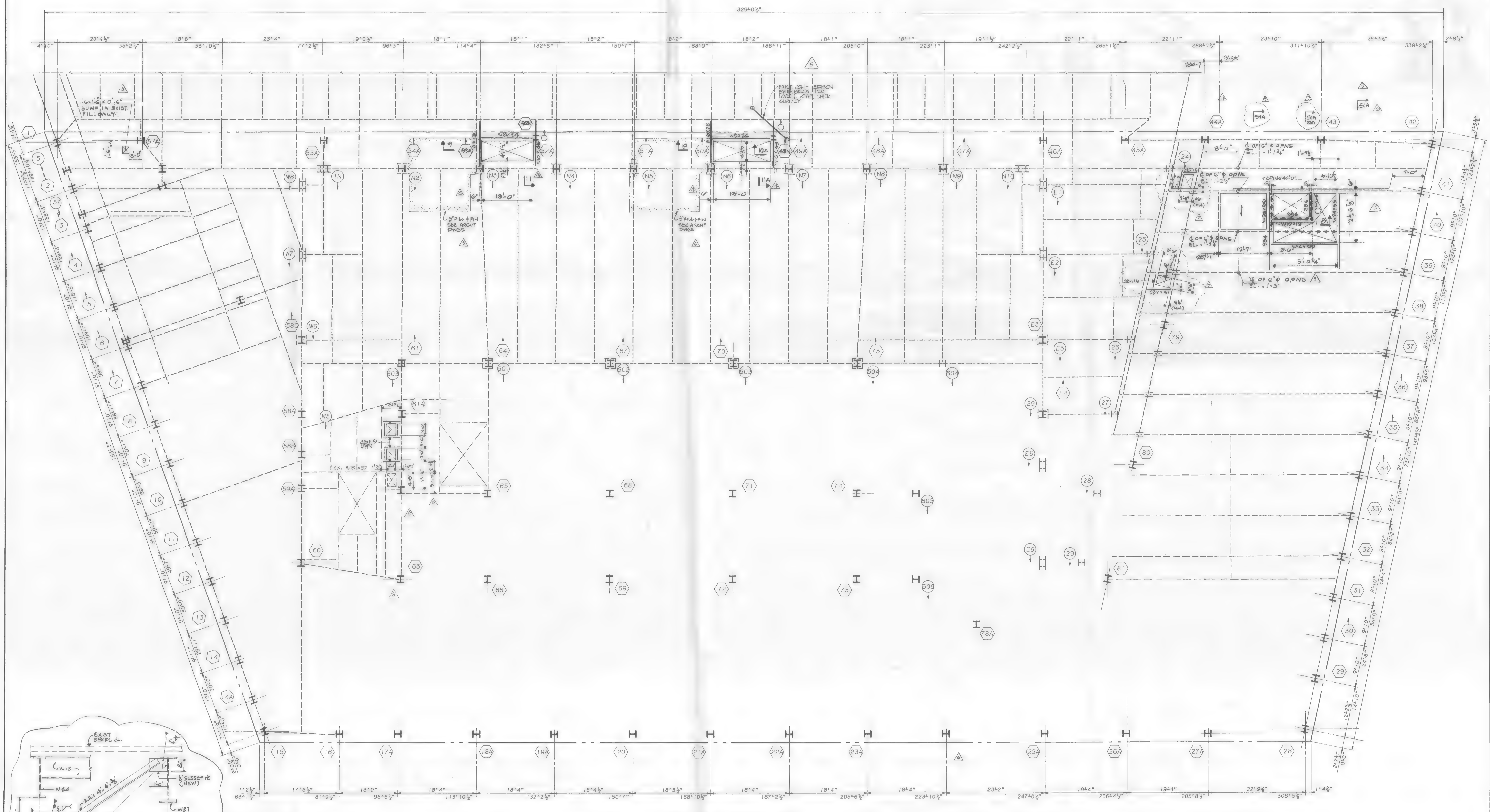
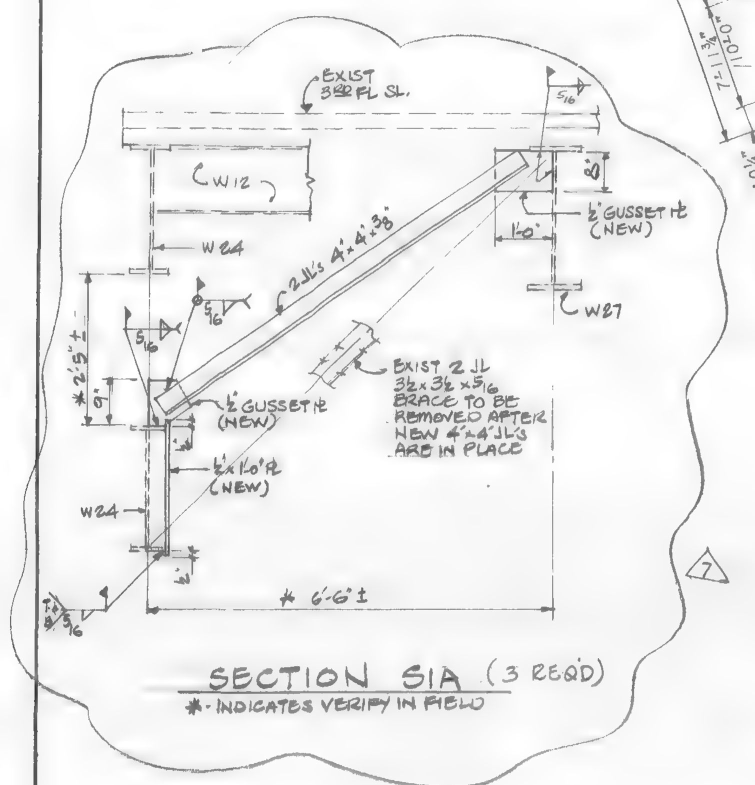


3RD FLOOR FRAMING PLAN



NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. —⧖— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. EL.± --- FROM TOP OF STEEL BEAM (3)
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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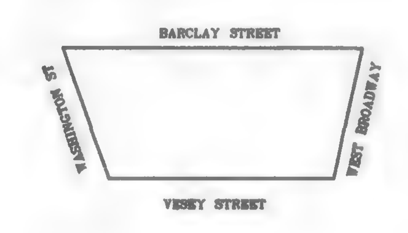

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
7	10-9-89	REVISED AS CIRCLED
6	8-15-89	REVISED AS CIRCLED
5	5/22/89	REVISED AS CIRCLED.
4	5/12/89	REVISED AS CIRCLED
3	4/6/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONSTRUCTION
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

SOM
SKIDMORE, OWINGS & MERRILL
ARCHITECTS / ENGINEERS
220 East 42nd St., New York, N.Y. 10017

FLACK AND KURTZ
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475 Fifth Avenue, New York, N.Y. 10018

IRWIN G. CANTOR P.C.
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MEMBER: THE CANTOR/SEINUK GROUP

3RD FLOOR FRAMING PLAN

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Scale:
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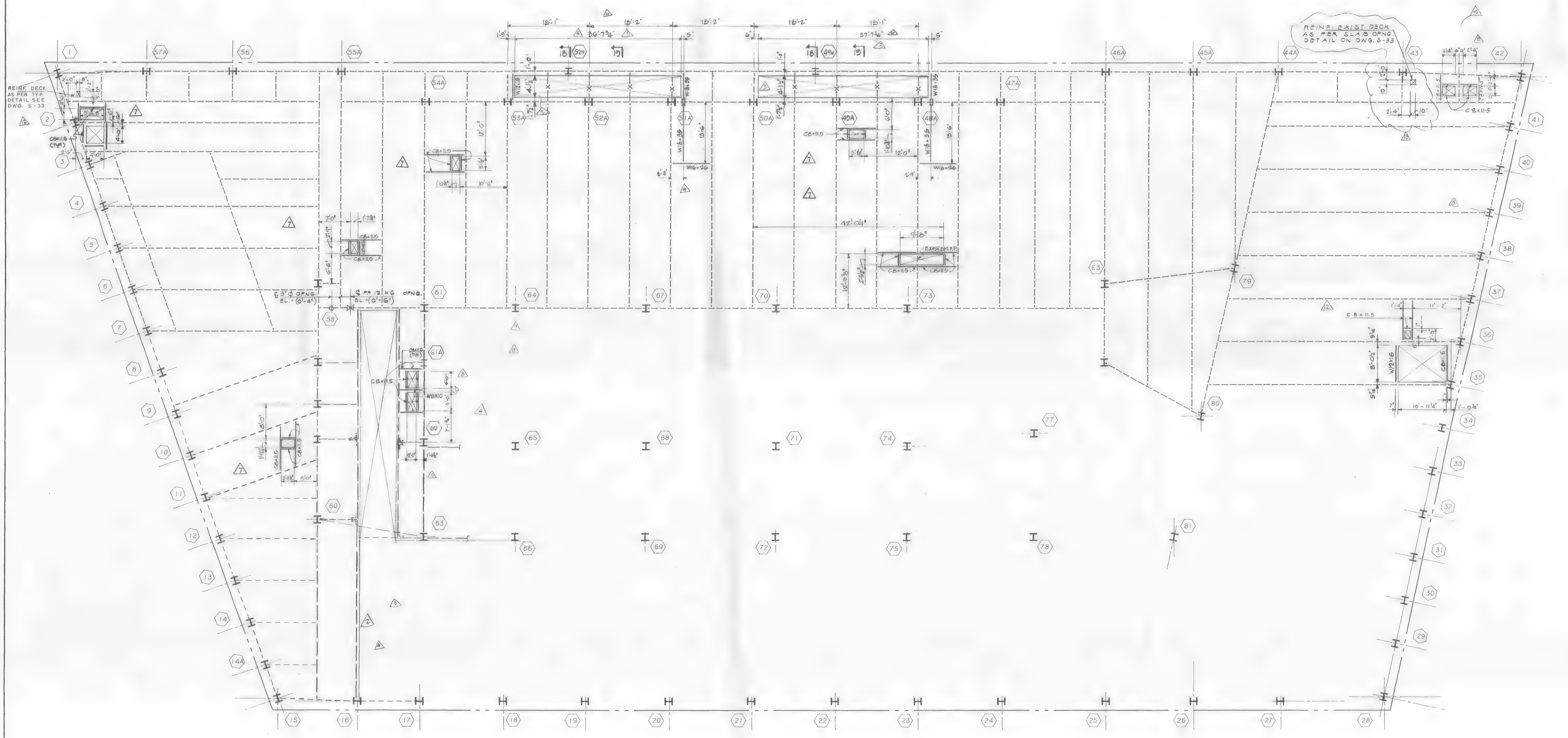

4TH FL. FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. INDICATES NEW STEEL FRAMING.
6. INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ±----- FROM TOP OF STEEL BEAM
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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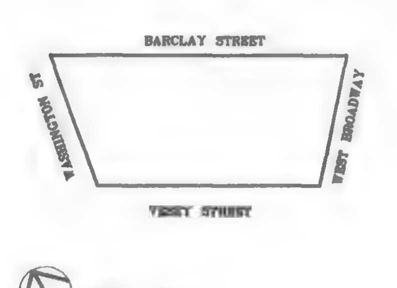

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
13	8-17-90	ISSUED FOR BULLETIN #116
12	6-7-90	ISSUED AS BULLETIN No 94
11	2/12/90	ISSUED FOR BULLETIN NO. 58
10	1/26/90	ISSUED FOR BULLETIN NO 45
9	10/9/89	REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	8/10/89	ISSUED FOR FIELD SKETCH
6	5/22/89	REVISED AS CIRCLED
5	5/22/89	REVISED AS CIRCLED
4	4/6/89	REVISED AS CIRCLED
3	1/20/89	REVISED AS CIRCLED
2	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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4TH FLOOR FRAMING PLAN

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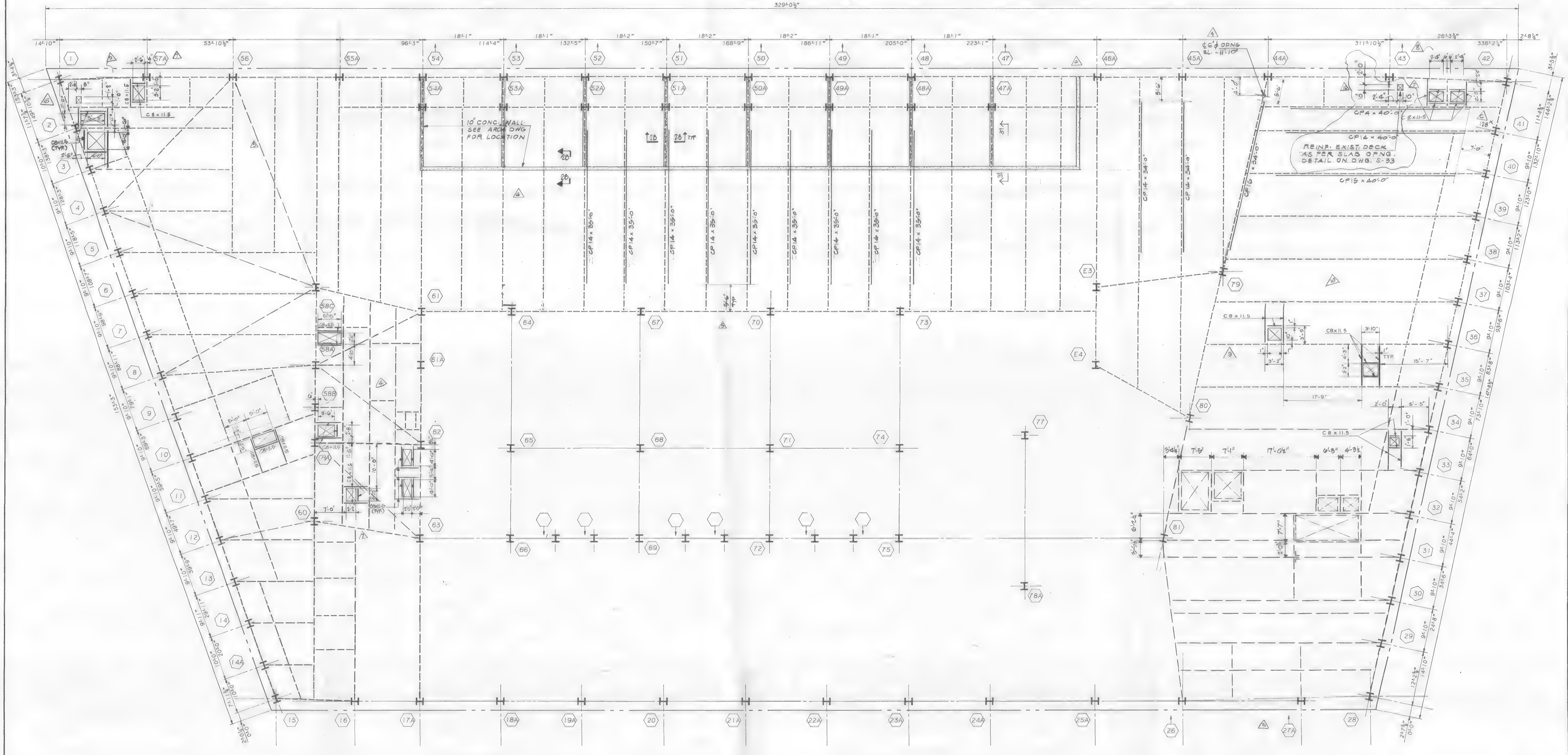

5TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 14" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ☒ INDICATES EXISTING SLAB OPENING.
8. ☒ INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. —☒— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
12 △ INDICATES TYPE OF EXISTING CONNECTION REINF. DETAIL, SEE DETAIL ON DWG. S-33

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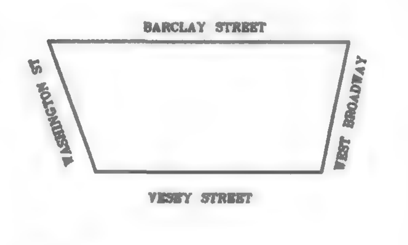

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10	8-17-90	ISSUED FOR BULLETIN #116
9	6-7-90	ISSUED FOR BULLETIN No 94
8	1/28/90	ISSUED FOR BULLETIN NO. 45
7	8/15/89	REVISED AS CIRCLED
6	8/10/89	ISSUED FOR FIELD SKETCH
5	5/22/89	REVISED AS CIRCLED
4	4-6-89	REVISED AS CIRCLED
	4-1-89	ISSUED TO CON EDISON FOR APPROVAL
3	3/1/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/22/88	REV. AS CIRCLED
	10/19/88	SUBMITTED TO B.M. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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5TH FLOOR FRAMING PLAN

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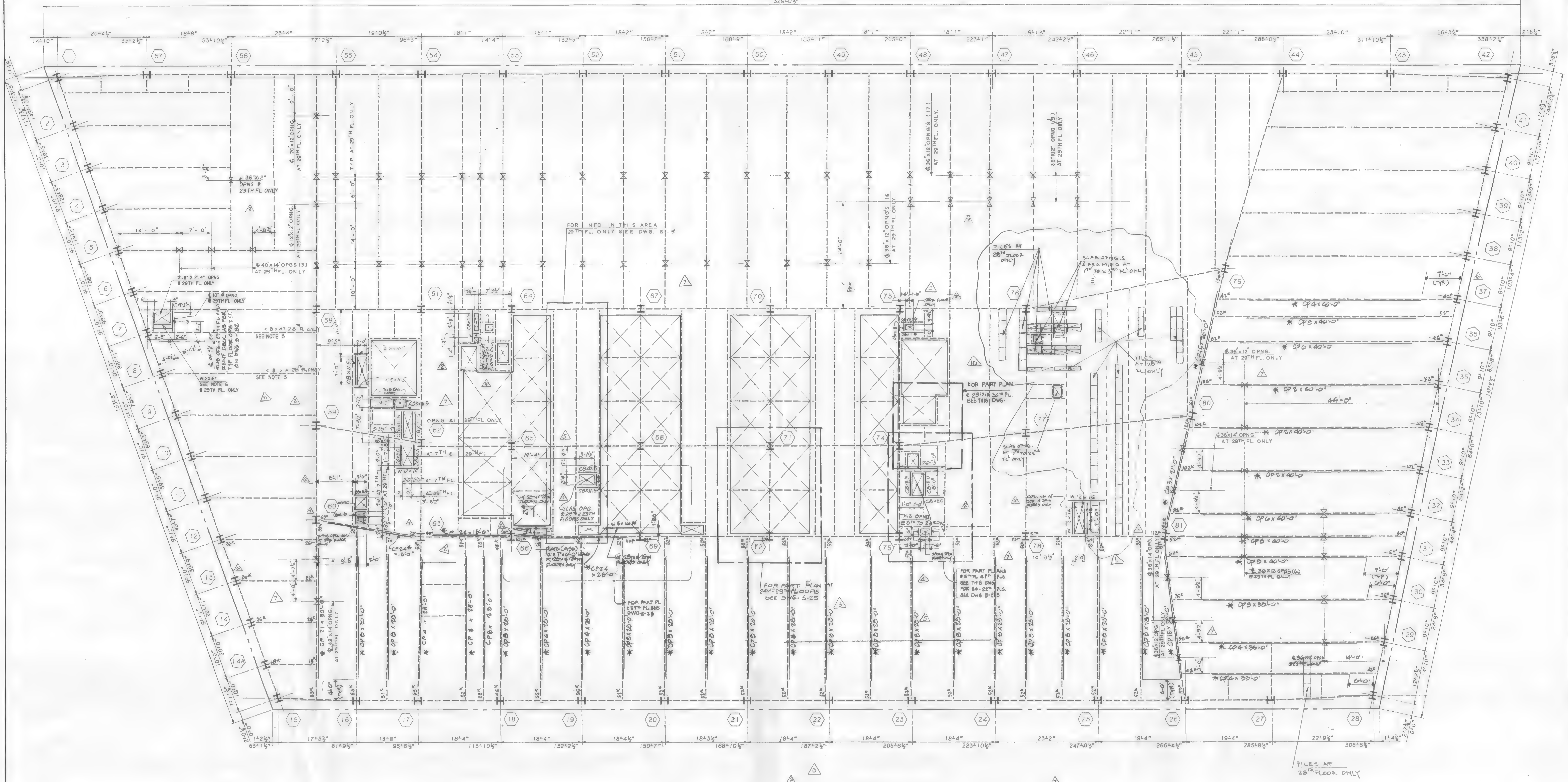
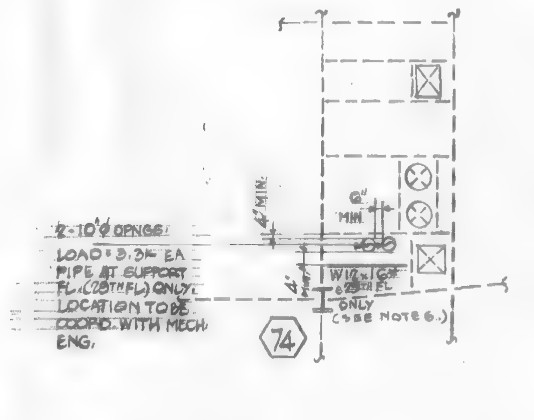


TYPICAL FLOOR FRAMING PLAN - 7TH TO 29TH FLOORS

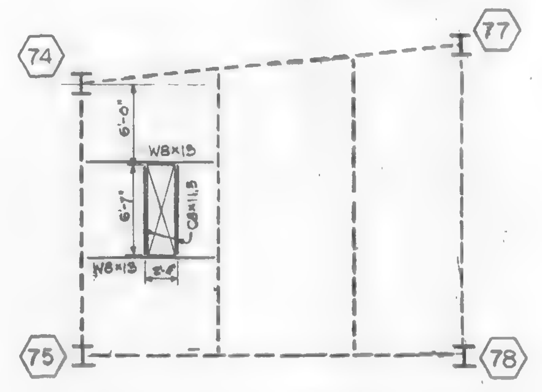
7TH TO 14TH FLOORS AS SHOWN - 15TH TO 29TH FLOORS SIM.

NOTES:

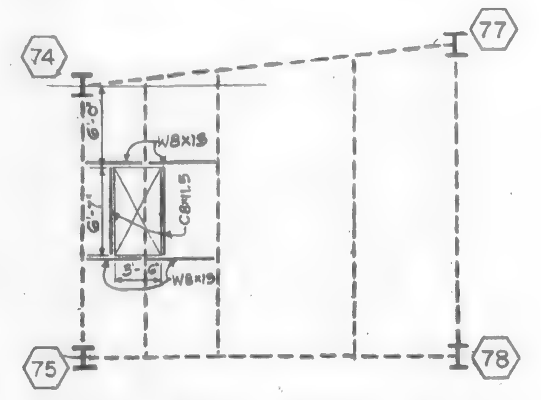
1. FOR NOTES NOT SHOWN SEE DWG. S-2
2. FOR PART PLANS AT 6TH FL. SEE DWG. S-25
3. ADDITIONAL EXIST. BEAM REINF. PLATES NOTED WITH AN ASTERISK * (OCCUR AT 28TH FL. ONLY)
4. —✱— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS (----) INDICATING DISTANCE BELOW TOP OF STEEL. BEAM.
5. WHERE NOTED PROVIDE 5" Ø CORE IN SLAB, PLACE ONE STUD PER CORE LOCATION, SPACED WITHIN NEW MECH. ROOM.
6. WHERE NOTED PLACE BEAMS TIGHT TO UNDERSIDE OF DECK AT RIB CLOSEST TO OPENINGS SHIM AT 1/4 POINT AS REQUIRED.



PART PLAN - 29TH TO 34TH FL.



PART PLAN – 6TH FLOOR



PART PLAN – 7TH FLOOR

ATTACHMENT "A"

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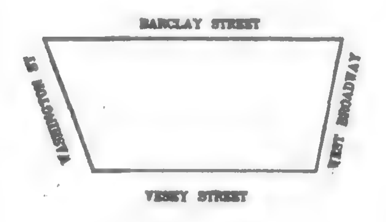

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	8/23/94	ISSUED FOR TENANT ALTERAT.
10	10/4/93	CHILLED WATER LINE RELOCAT.
9	6/2/93	ISSUED FOR ADDENDUM No. 1
8	5-21-93	ISSUED FOR TENNANT ALTERATION
7	7-3-90	ISSUED FOR BULLETIN #103
6	8/15/89	REVISED AS CIRCLED
5	4/6/89	REVISED AS CIRCLED
4	3/1/89	REVISED AS CIRCLED
3	1/20/89	REVISED AS CIRCLED
	1/13/89	ISSUED FOR CONST
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

SOM

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7TH TO 29TH FLOOR FRAMING PLAN

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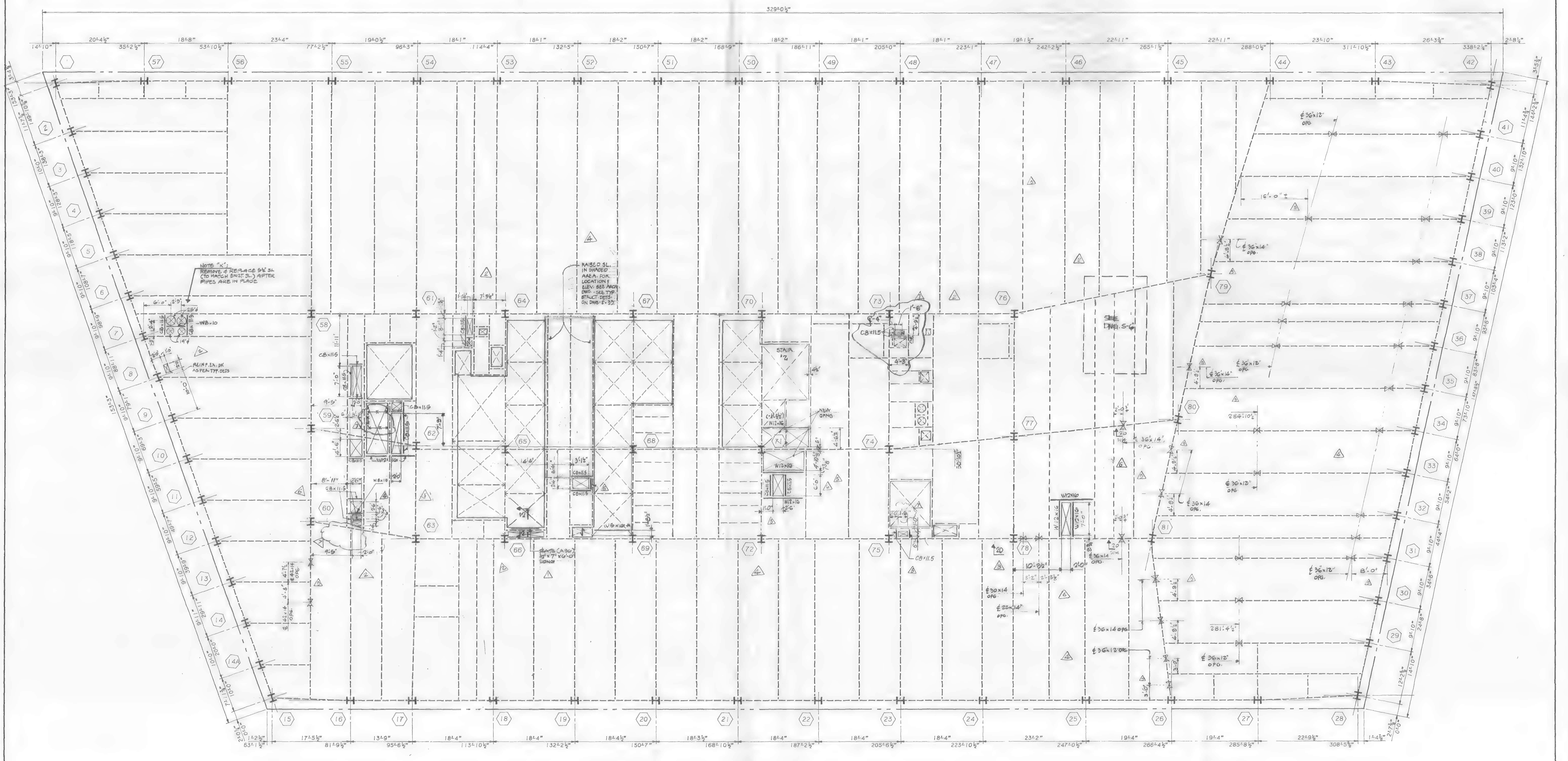

30TH FLOOR FRAMING PLAN

NOTES:
1. FOR NOTES NOT SHOWN SEE DWG S-2.

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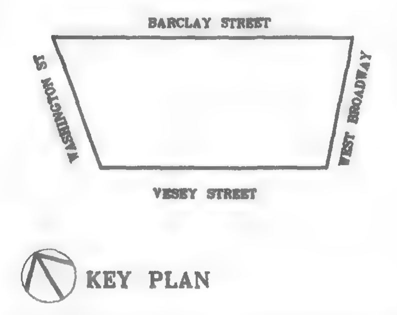

NOTES

LEGEND

No.	Date	Revision
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/13/89	ISSUED FOR CONST.
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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30TH FLOOR FRAMING PLAN

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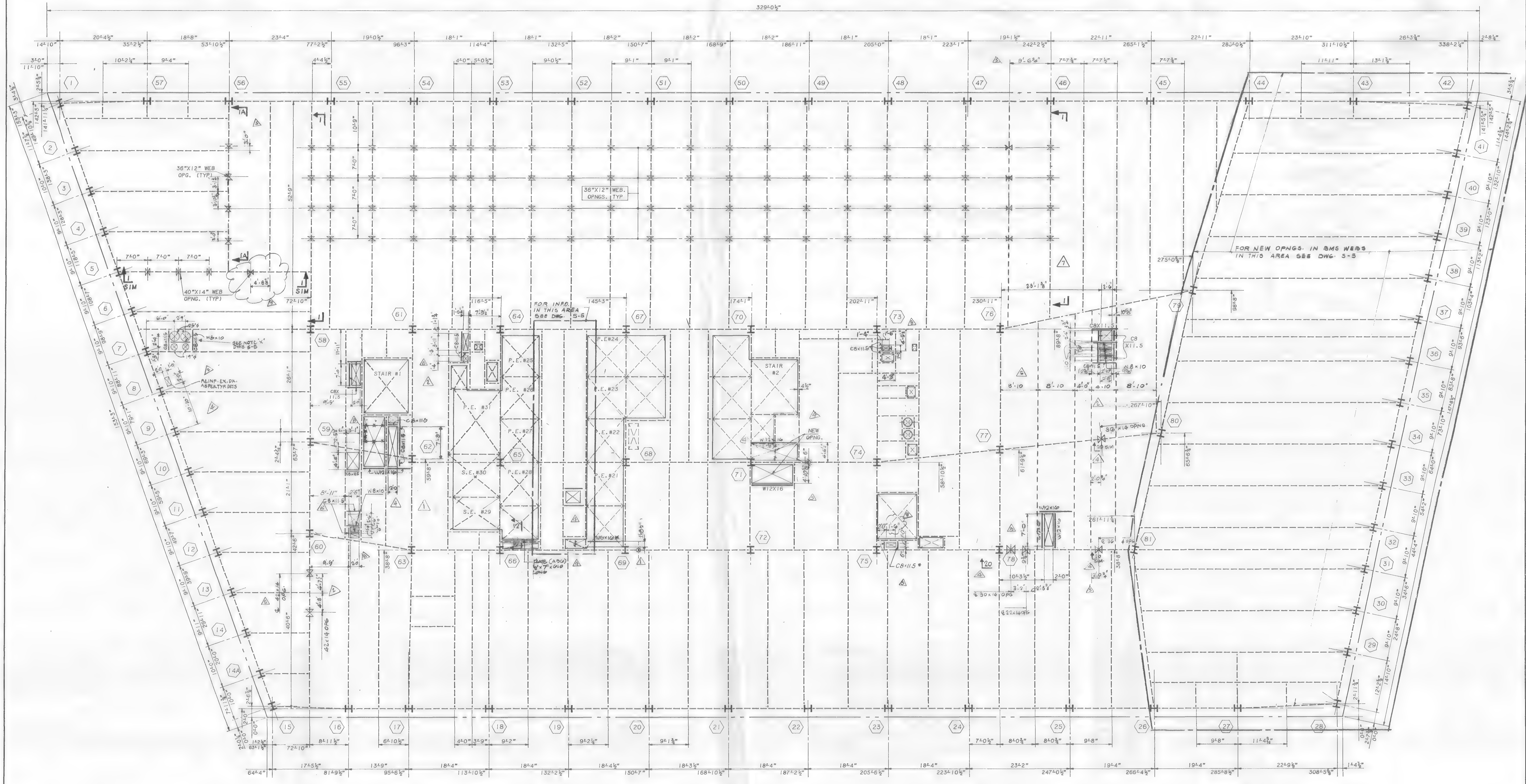

31ST FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. ---- INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS -.- INDICATING DISTANCE BELOW T/STL. BM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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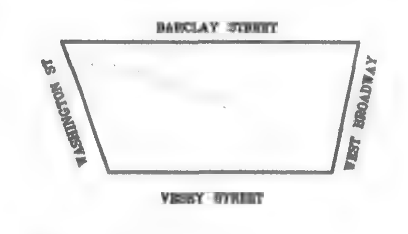

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
9		REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	6/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEVATION
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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31 ST. FLOOR FRAMING PLAN

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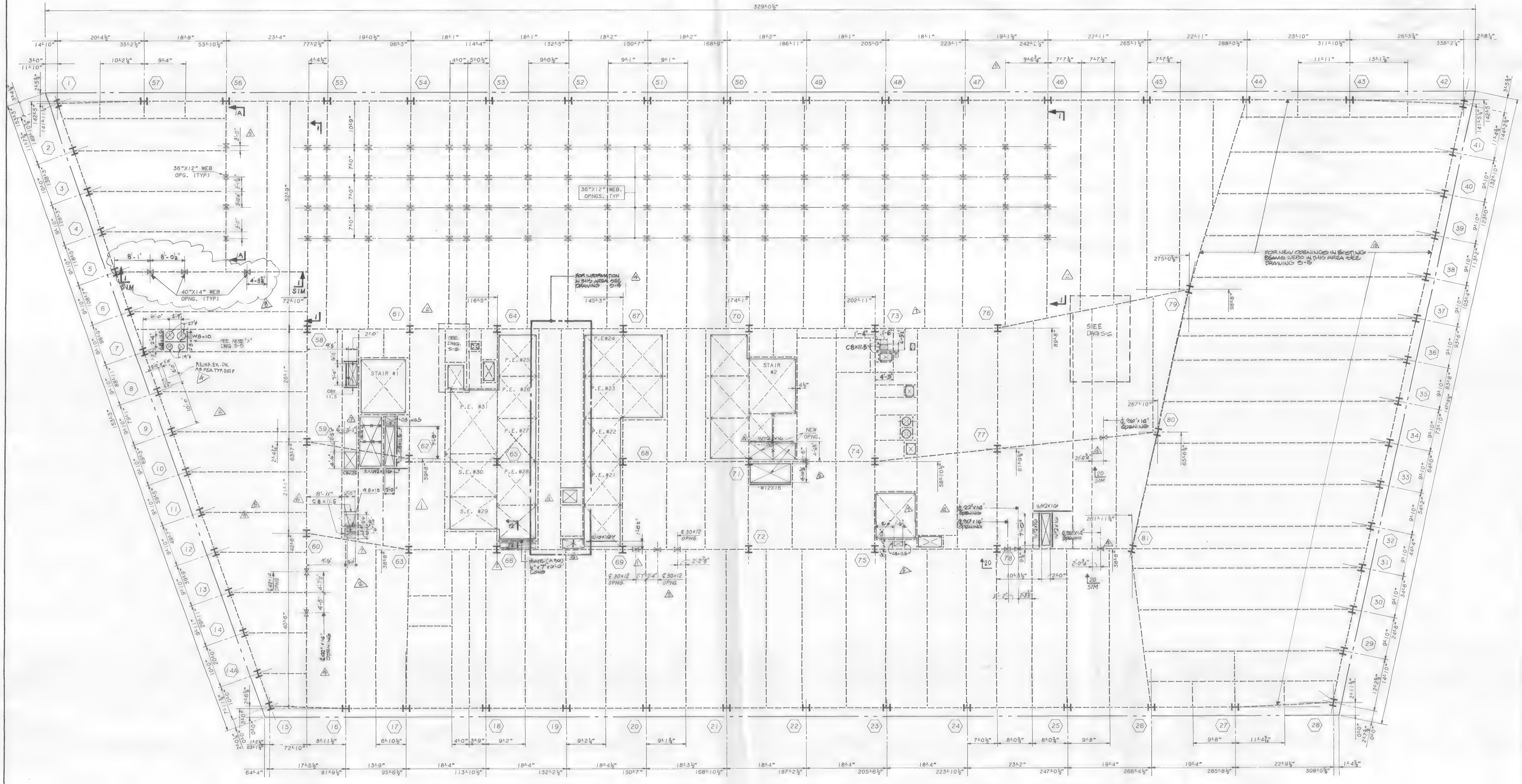

32ND FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟵⟶ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. ⬡ INDICATES NEW POST OR COLUMN.
10. —⊠— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS — FROM TOP OF BEAM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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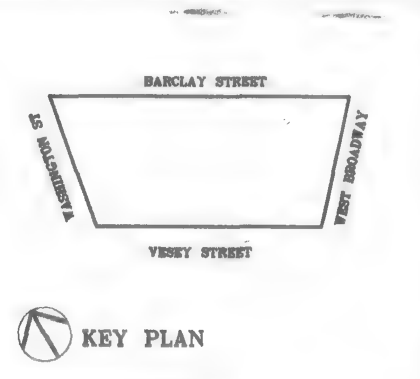

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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32ND. FLOOR FRAMING PLAN

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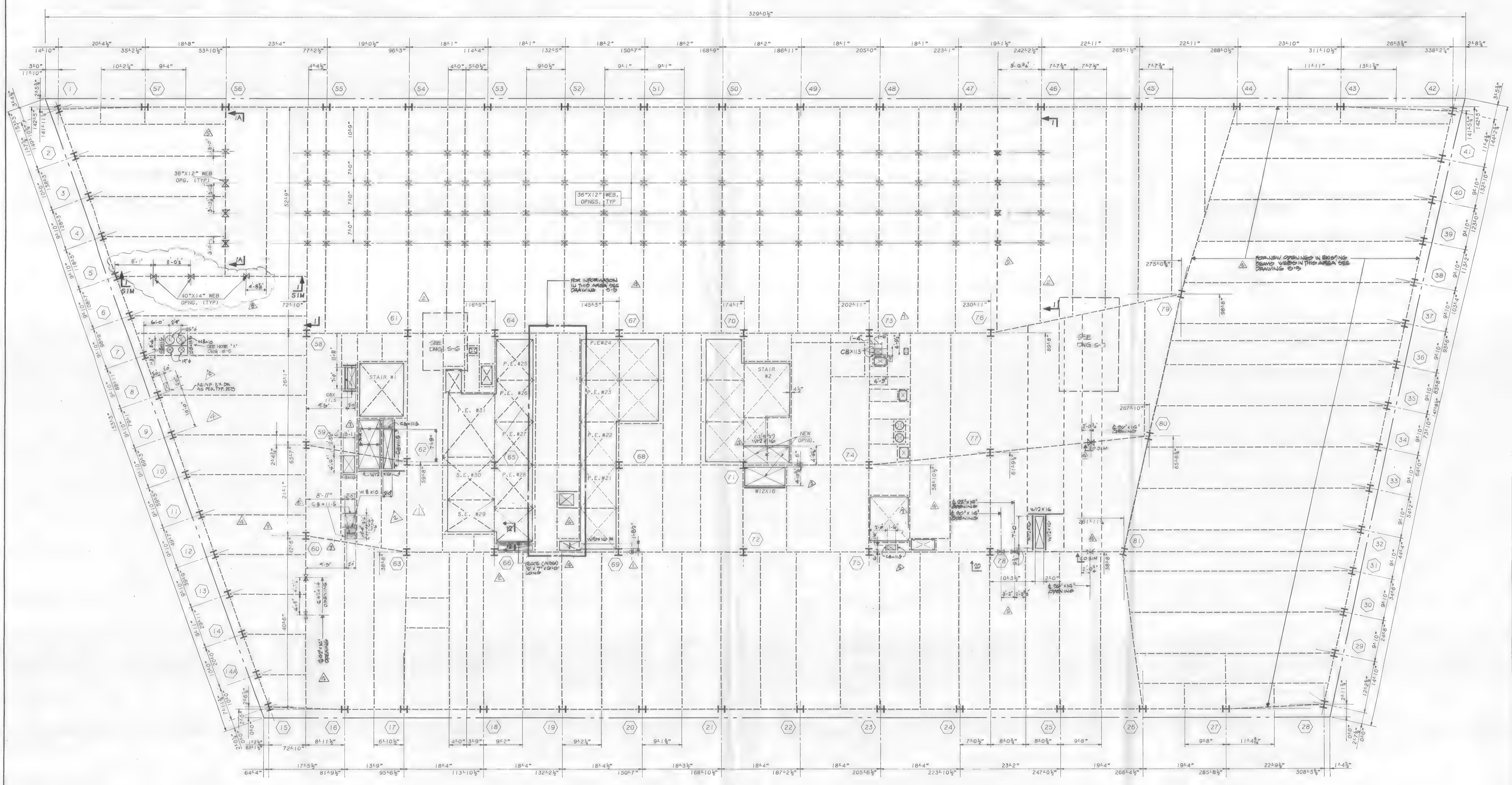


33RD FLOOR FRAMING PLAN

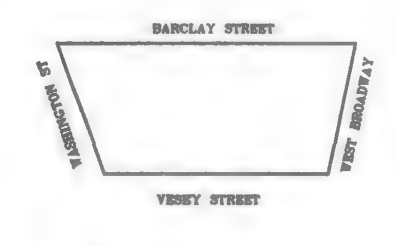
NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟵⟶ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —✕— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. ⟨...N⟩ INDICATES NEW POST OR COLUMN.
10. —✡— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS FROM TOP OF BEAM
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

STATE OF NEW YORK · IRWIN G. CANTOR No. 32548 · LICENSED PROFESSIONAL ENGINEERS

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048



KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	6/15/89	REVISED AS CIRCLED
6	4-6-89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATION

SOM
SKIDMORE, OWINGS & MERRILL
ARCHITECTS / ENGINEERS
220 East 42nd St., New York, N.Y. 10017

FLACK AND KURTZ
Mechanical / Electrical Engineers
475 Fifth Avenue, New York, N.Y. 10018

IRWIN G. CANTOR P.C.
Structural Engineers
219 East 42nd St., New York, N.Y. 10017
MEMBER: THE CANTOR/SEINUK GROUP

33RD FLOOR FRAMING PLAN

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Project No.:
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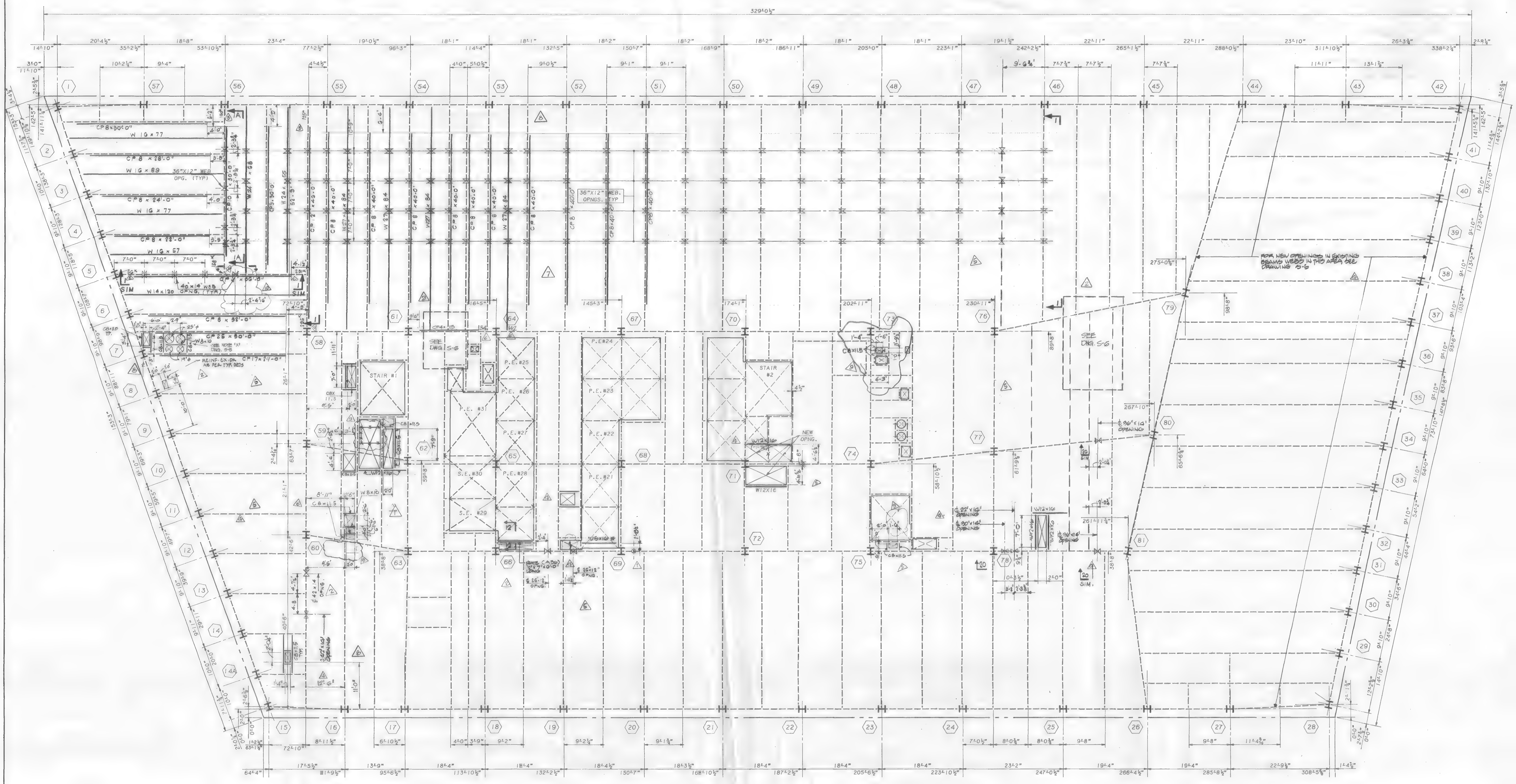
Scale:
Sheet No. S-8

38957



34TH FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. INDICATES NEW STEEL FRAMING.
6. INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS --- INDICATING DISTANCE BELOW T/STL. BM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
12. (C) INDICATES TYPE OF REINFORCED EXIST. CONNECTIONS, SEE TYP. DET. DWG S-33.

Salomon Brothers Inc

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NEW YORK, NEW YORK 10048

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10		REVISED AS CIRCLED
9	8/15/89	REVISED AS CIRCLED
8	8-10-89	ISSUED FOR FIELD SKETCH
7	5-22-89	REVISED AS CIRCLED
6	4-6-89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REV. AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

SOM

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FLACK AND KURTZ
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MEMBER THE CANTOR/SEINUK GROUP

34 TH FLOOR FRAMING PLAN

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Project No.:
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Scale:
Sheet No. S-9

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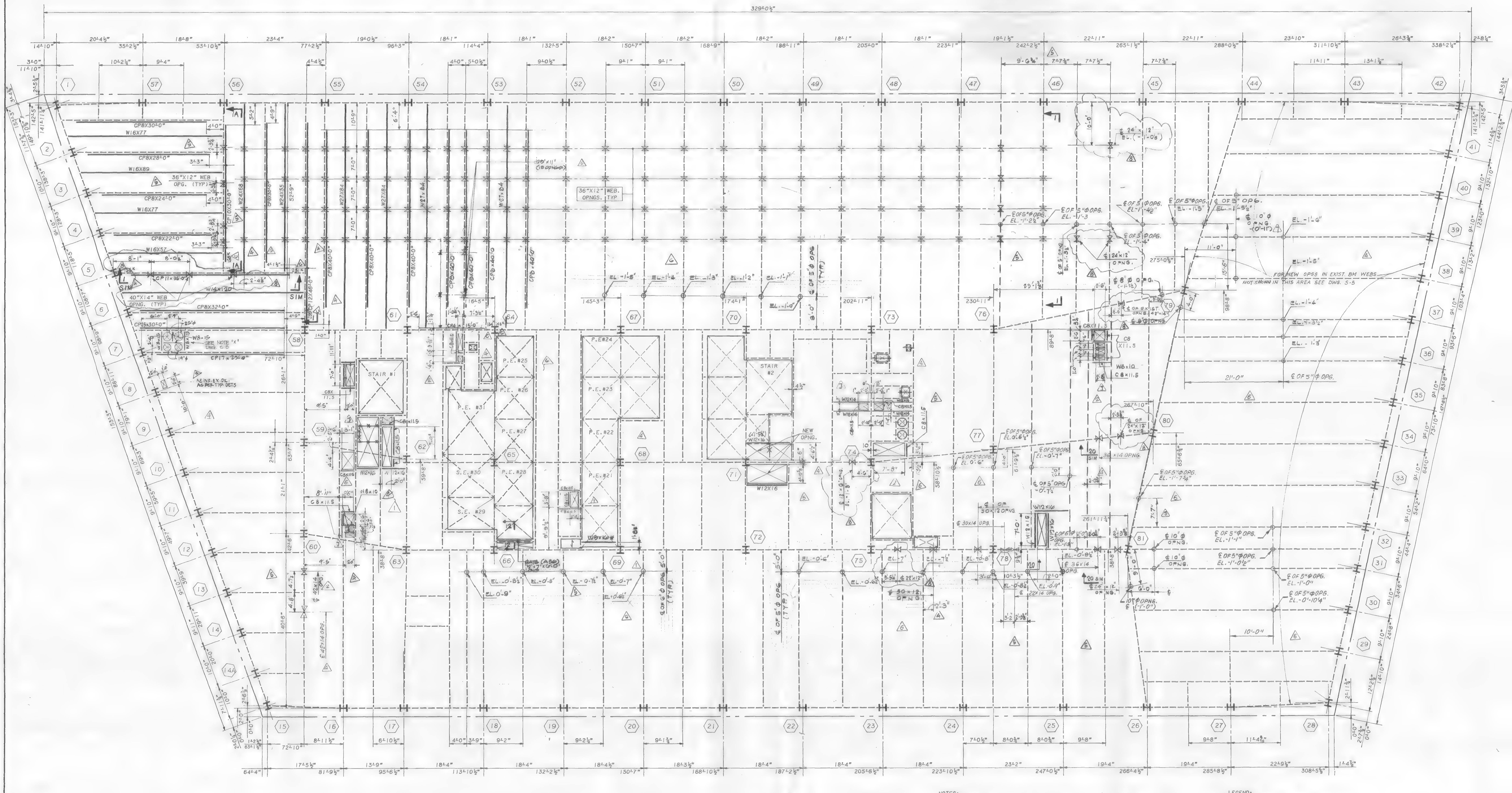

35TH FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ALL PLUMBING & RL's TO BE VERIFIED WITH PLUMBING SHOP DWGS. BEFORE PROCEEDING WITH WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. ⟨...N⟩ INDICATES NEW POST OR COLUMN.
10. —⊠— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ±--- FROM TOP OF STEEL BEAM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
12. △ INDICATES TYPE OF EXIST. CONNECTION REINF. DETAIL SEE DETAIL ON DWG. S-33

STATE OF NEW YORK — IRWIN G. CANTOR No. 32548 — LICENSED PROFESSIONAL ENGINEERS

Salomon Brothers Inc

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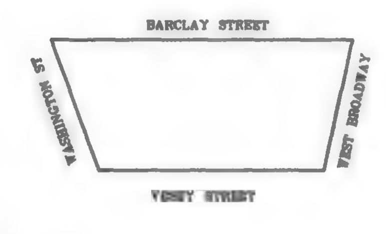

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REV. AS CIRCLED
3	1/3/89	ISSUED FOR CONSTRUCTION
2	12/22/88	REVISED AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

SOM
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35TH FLOOR FRAMING PLAN

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Sheet No. S-10

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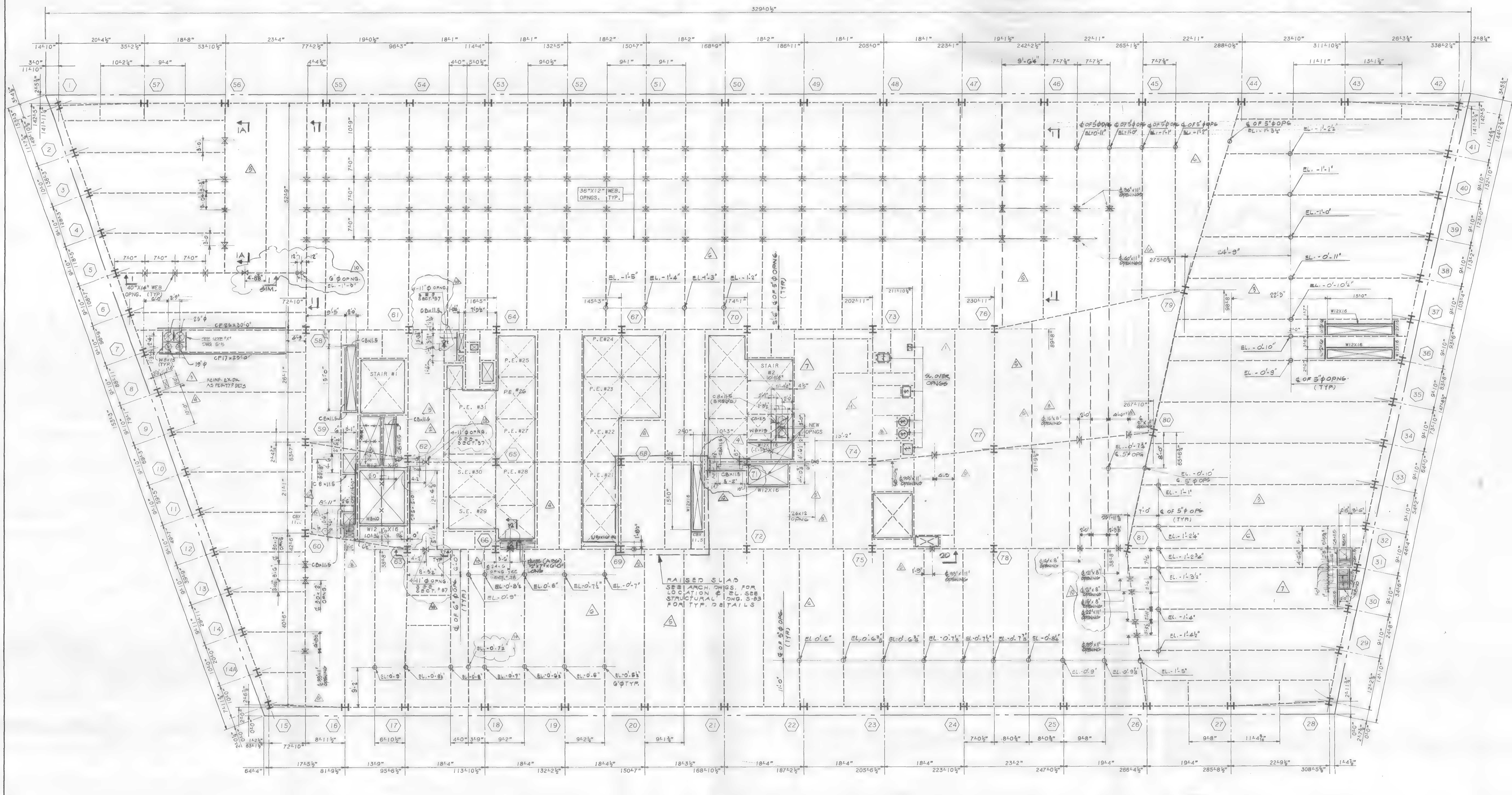

36TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (± ---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ALL PLUMBING & EL'S TO BE VERIFIED WITH PLUMBING SHOP DWGS. BEFORE PROCEEDING WITH WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
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7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ---- INDICATING DISTANCE BELOW T/STL. BM.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33

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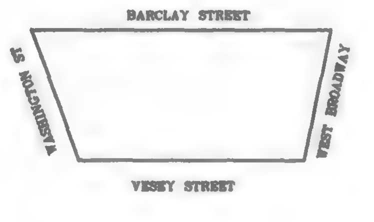

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10	7-3-90	ISSUED FOR BULLETIN #103
9	8/22/89	ISSUED FOR FIELD SKETCH
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/16/88	REVISED AS CIRCLED FOR SHUTTLE ELEVATION
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10/31/88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS.

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36TH FLOOR
FRAMING PLAN

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Scale:
Sheet No. S-11

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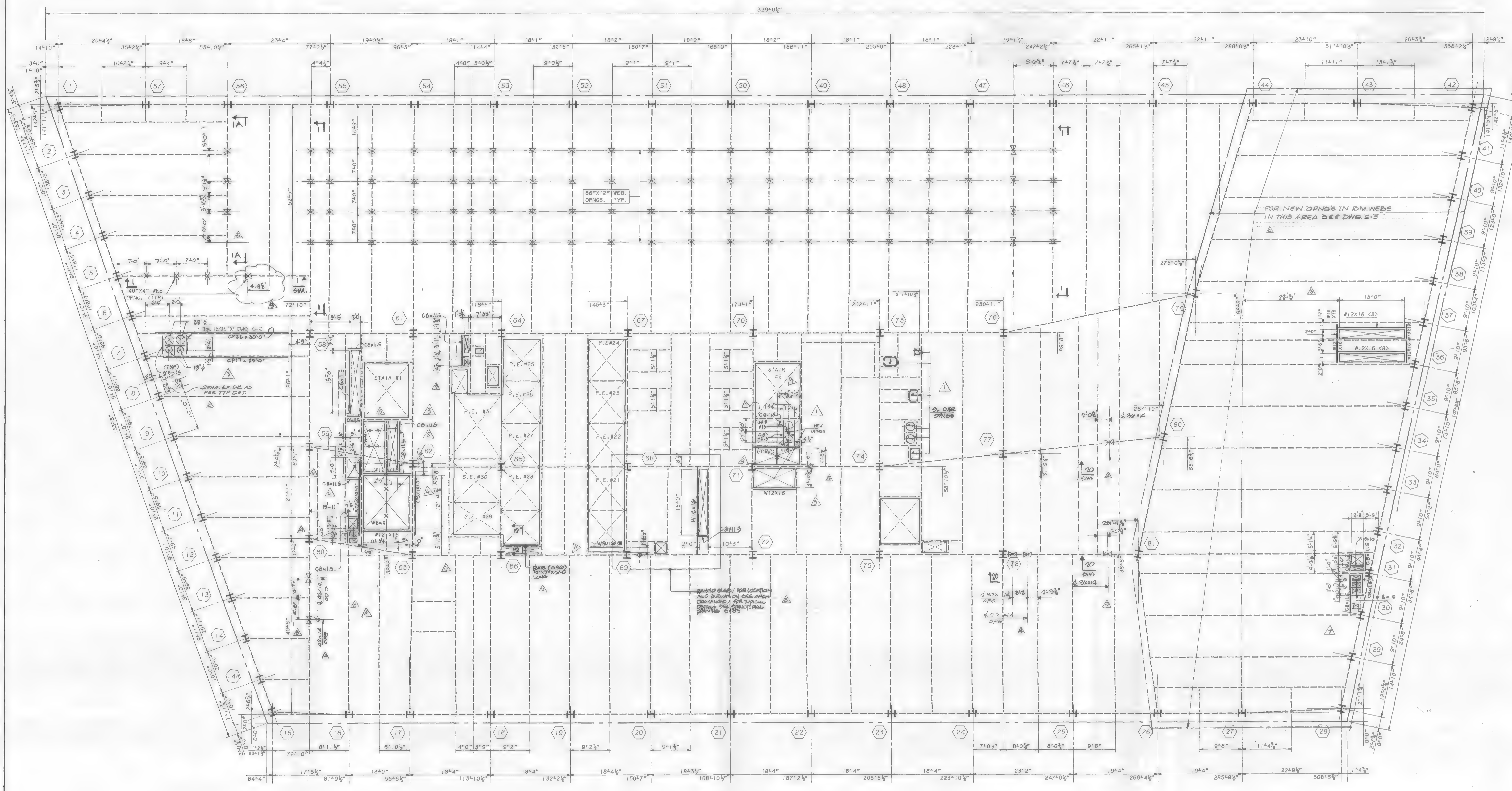

37TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ☒ INDICATES EXISTING SLAB OPENING.
8. ☒ INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ¢ OF PENETRATION SHALL BE AT ¢ OF BEAM U.O.N. THUS ---- FROM TOP OF BEAM.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

STATE OF NEW YORK · IRWIN G. CANTOR · No. 32648 · LICENSED PROFESSIONAL ENGINEERS

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

KEY PLAN (BARCLAY STREET, WEST BROADWAY, VESEY STREET, WASHINGTON ST)

NOTES

LEGEND

No.	Date	Revision
9		REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	6/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REVISED AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10/31/88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG. MODIFICATIONS

SOM
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37TH FLOOR FRAMING PLAN

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Sheet No. S-12

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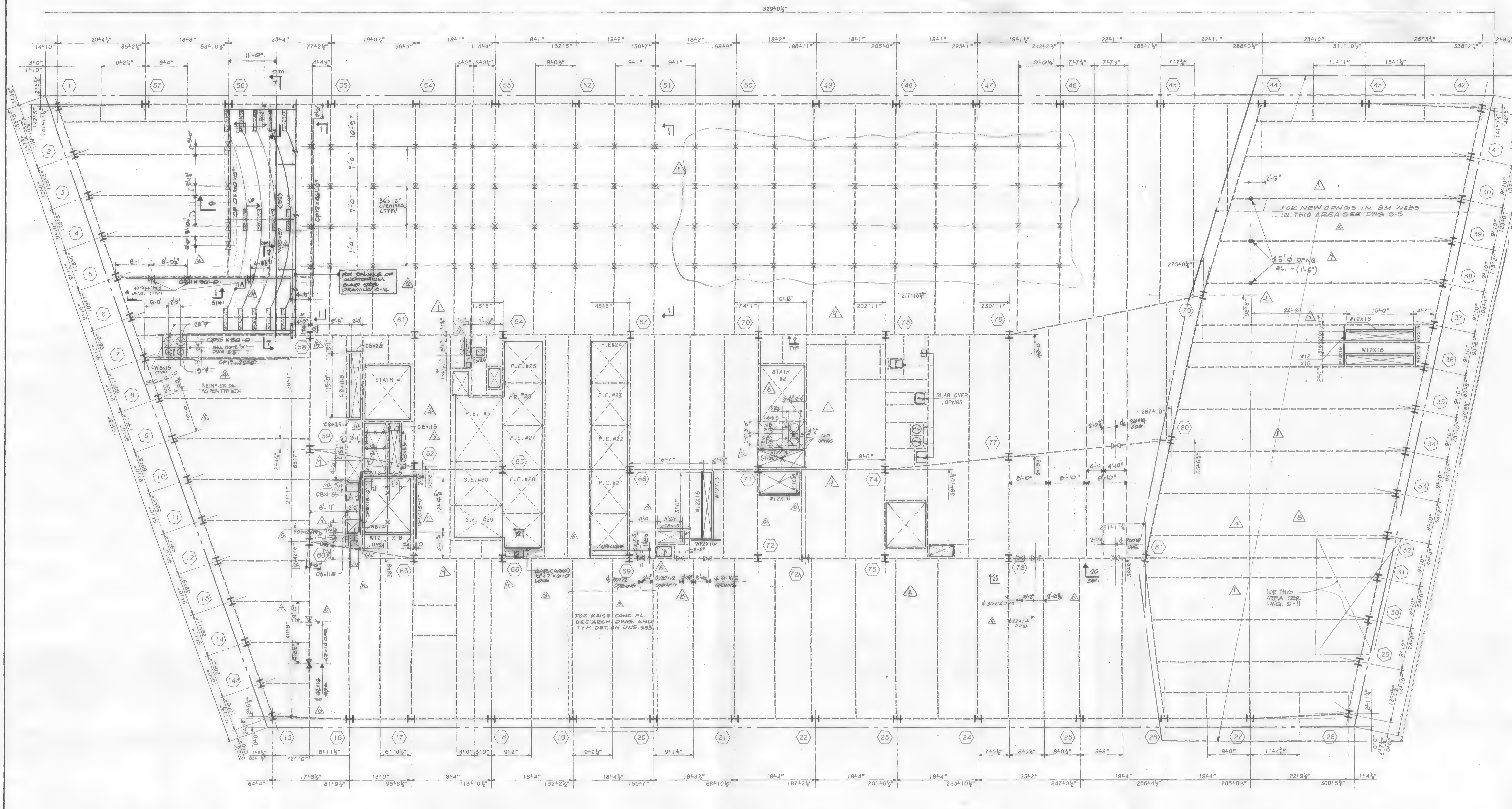

38TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. – – – – INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN. TO BE W8 x 28 U.O.N.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ---: INDICATING DISTANCE DOWN T/STL. BM.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. (C) INDICATES TYPE OF EXIST. CONNECTION REINF. DETAIL. SEE DETAIL ON DWG. S-33

Salomon Brothers Inc

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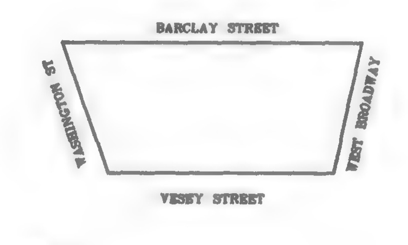
NEW YORK, NEW YORK 10048



KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	11/30/89	BULLETIN #15
10	8/15/89	REVISED AS CIRCLED
9	6/12/89	REVISED AS CIRCLED
8	6/22/89	REVISED AS CIRCLED
7	4/6/89	REVISED AS CIRCLED
6	3/1/89	REVISED AS CIRCLED
5	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
4	12/22/88	REV. AS CIRCLED
3	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
2	11/21/88	REVISION TO 11/7/88 SUBMISSION
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10/31/88	ISSUED TO P.A FOR APPROVAL OF BASE BLDG. MODIFICATIONS.

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38TH FLOOR FRAMING PLAN

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Sheet No. S-13

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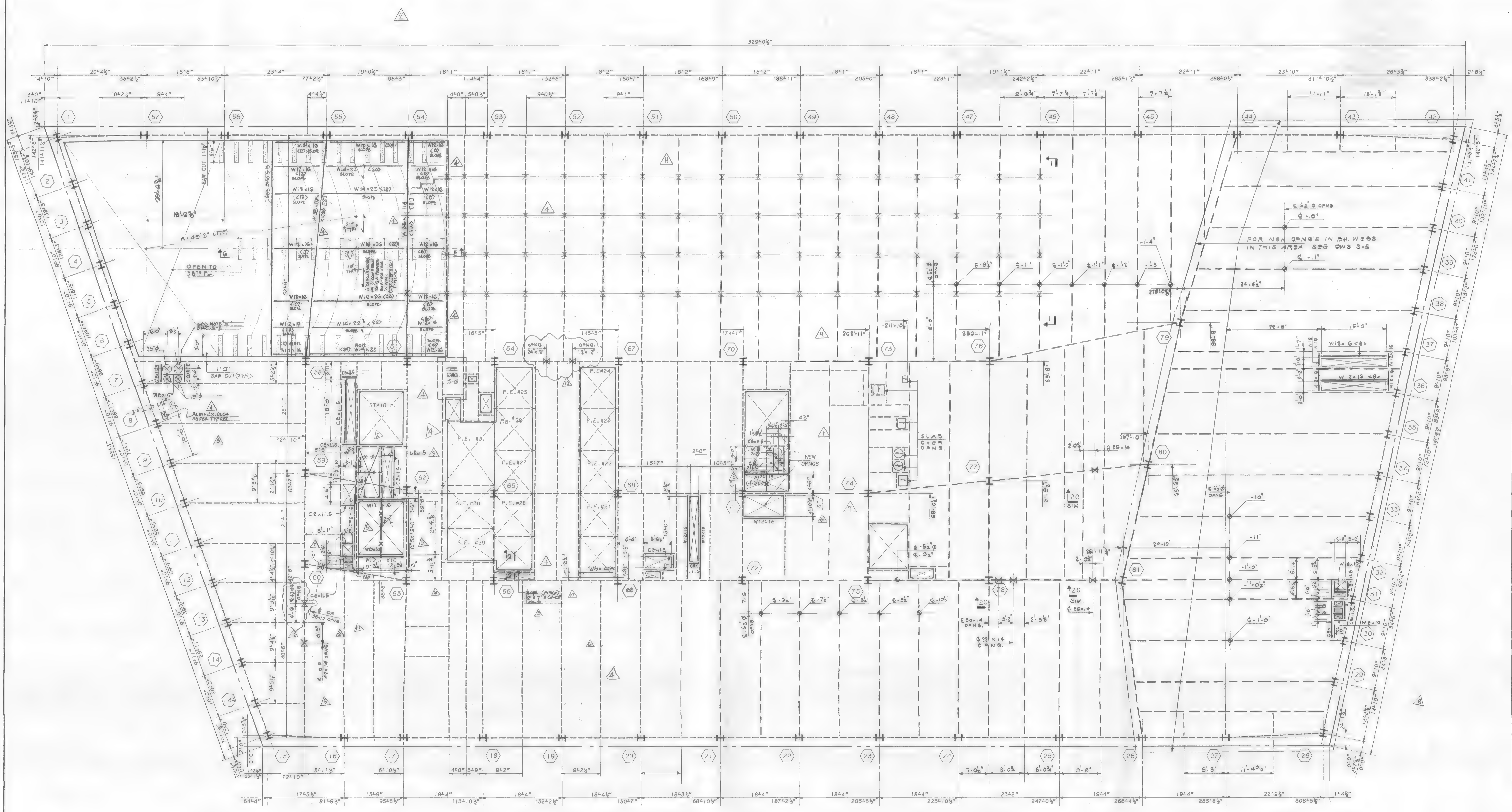

39TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. CONTRACTOR TO SUBMIT DETAIL FOR SUPPORT OF EXIST. PIPES IN OPEN AREA FOR ENGINEERS REVIEW AND APPROVAL.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN. TO BE W8×28 U.O.N.
10. —⧖— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33

Salomon Brothers Inc

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NEW YORK, NEW YORK 10048

BARCLAY STREET / WEST BROADWAY / VESEY STREET / WASHINGTON ST.

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
12	4/24/90	ISSUED FOR BULLETIN #74
11	11/30/89	BULLETIN #15
10	8/15/89	REVISED AS CIRCLED
9	6/12/89	REVISED AS CIRCLED
8	5/22/89	REVISED AS CIRCLED
7	4/6/89	REVISED AS CIRCLED
6	3/1/89	REVISED AS CIRCLED
5	1/20/89	REV. AS CIRCLED
	1/3/89	ISSUED FOR CONST.
4	12/22/88	REV. AS CIRCLED
3	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
2	11/21/88	REVISION TO 11/7/88 SUBMISSION
1	11/7/88	REVISION TO 10/21/88 SUBMISSION
	10-31-88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

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39TH FLOOR FRAMING PLAN

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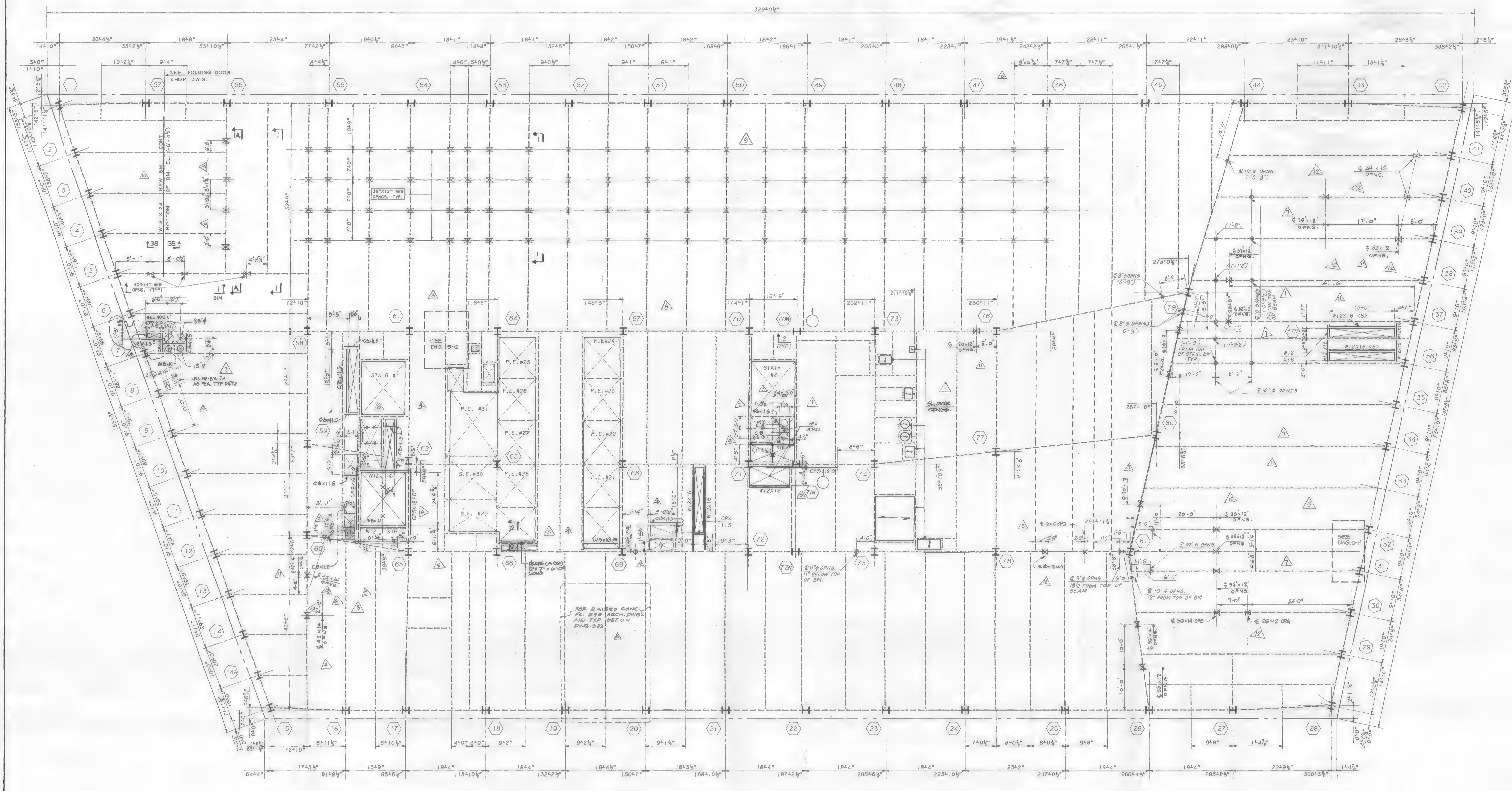


40TH FLOOR FRAMING PLAN

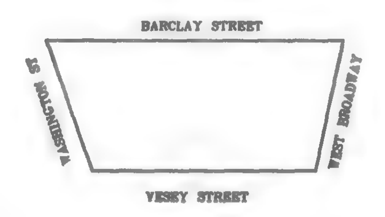
NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ☒ INDICATES EXISTING SLAB OPENING.
8. ☒ INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMN. TO BE W8x28 U.O.N.
10. —X— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

STATE OF NEW YORK · IRWIN G. CANTOR · No. 32548 · LICENSED PROFESSIONAL ENGINEERS

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048



KEY PLAN

NOTES

LEGEND

No.	Date	Revision
13	7/3/90	ISSUED FOR BULLETIN #103
12	5/10/90	ISSUED FOR BULLETIN #84
11	4/24/90	ISSUED FOR BULLETIN #79
10	3/30/90	REVISED AS CIRCLED
9	11/30/89	BULLETIN #15
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	10-31-88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

SOM

SKIDMORE, OWINGS & MERRILL
ARCHITECTS / ENGINEERS
220 East 42nd St., New York, N.Y. 10017

FLACK AND KURTZ
Mechanical / Electrical Engineers
475 Fifth Avenue, New York, N.Y. 10018

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MEMBER: THE CANTOR/SEINUK GROUP

40TH FLOOR
FRAMING PLAN

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Project No.:
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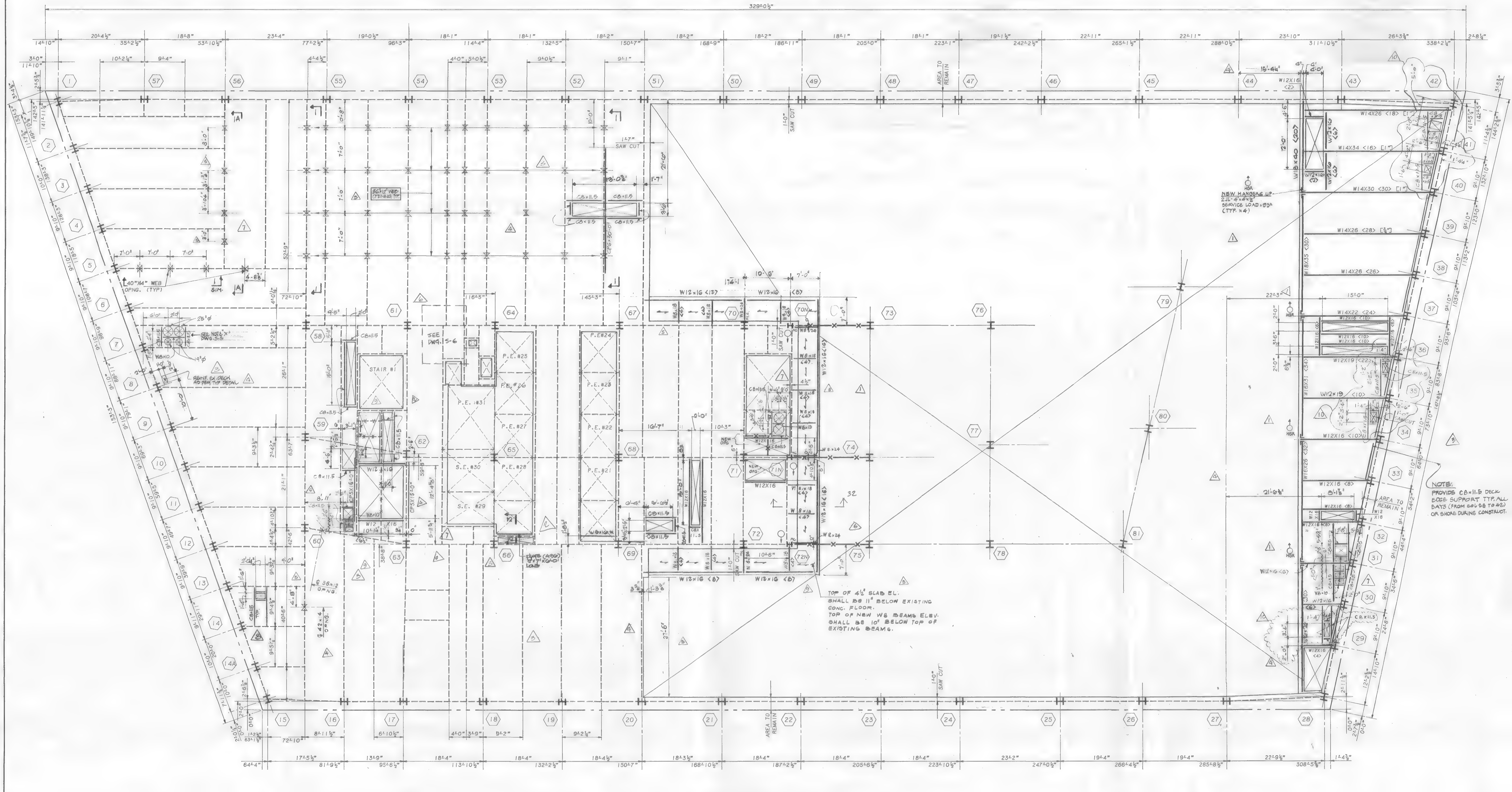
Scale:
Sheet No. S-15



41ST FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. CONTRACTOR TO SUBMIT DETAIL FOR SUPPORT OF EXIST. PIPES IN OPEN AREA FOR ENGINEERS REVIEW AND APPROVAL.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. (arrow) INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. (solid line) INDICATES NEW STEEL FRAMING.
6. (dashed line) INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMNS TO ~~BE~~ W8×28 U.O.N.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. M.C. INDICATES MOMENT CONNECTION (FULL CAPACITY).

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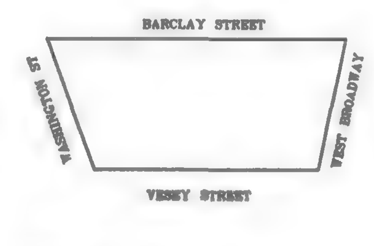

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
10	1/26/90	ISSUED FOR BULLETIN NO. 45
9	9/15/89	REVISED AS CIRCLED
8	6/10/89	ISSUED FOR FIELD SKETCH
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11-7-88	REVISION TO 10/31/88 SUBMISSION
	10-31-88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

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41ST FLOOR FRAMING PLAN

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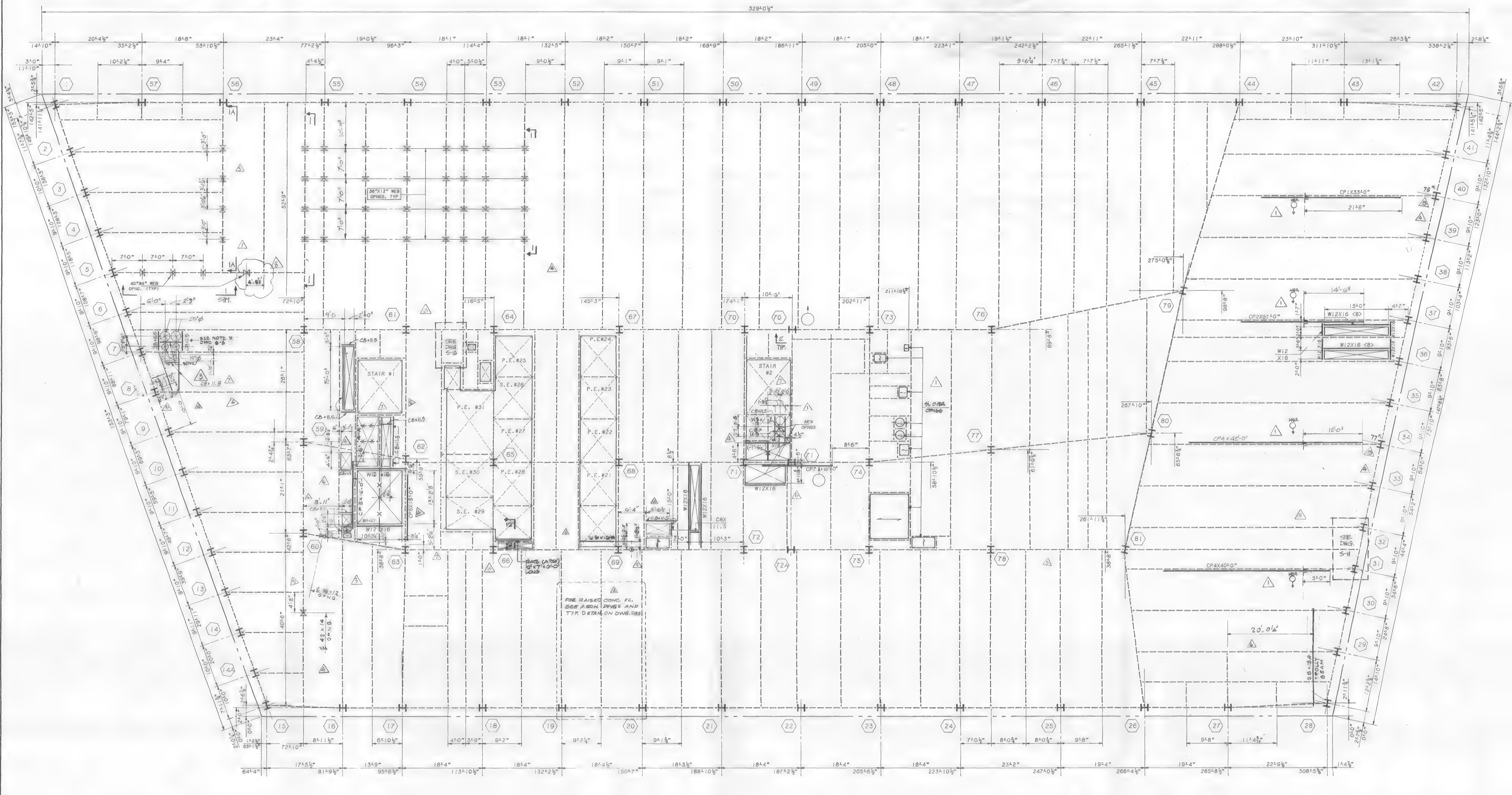
Scale:
Sheet No. S-16

88057 S-16



42ND FLOOR FRAMING PLAN

NOTES:
1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:
1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. ----- INDICATES EXISTING STEEL FRAMING.
7. [X] INDICATES EXISTING SLAB OPENING.
8. [X] INDICATES NEW SLAB OPENING.
9. (...N) INDICATES NEW POST OR COLUMNS TO BE W8×28 U.O.N.
10. —X— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS-.... FROM TOP OF BEAM 7
11. CP... INDICATES REINF. FOR EXIST. BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

STATE OF NEW YORK · IRWIN G. CANTOR No. 32548 · LICENSED PROFESSIONAL ENGINEERS

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KEY PLAN

NOTES

LEGEND

No.	Date	Revision
8		REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV...
1	11/7/88	REVISION TO 10/31/88 SUBMISSION
	OCT. 31. 88	ISSUED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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42ND FLOOR FRAMING PLAN

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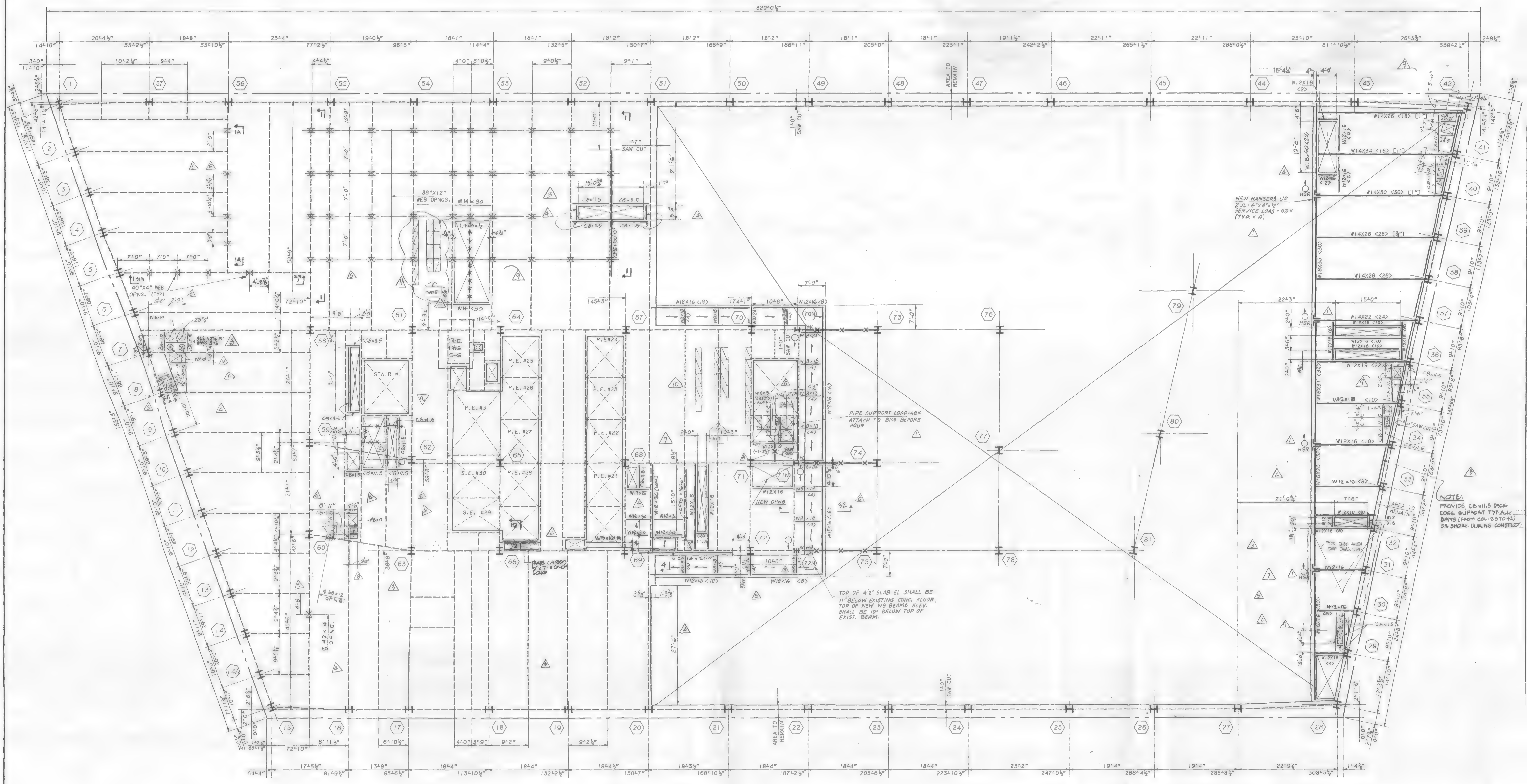

43RD FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. CONTRACTOR TO SUBMIT DETAIL FOR SUPPORT OF EXIST. PIPES IN OPEN AREA FOR ENGINEERS REVIEW AND APPROVAL.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING & BALCONIES (5)
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMNS TO BE W8x28 U.O.N.
10. —⧖— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. ✳ INDICATES CO-ORDINATE LOCATION OF BEAM WITH ELEVATOR SHOP DWGS.

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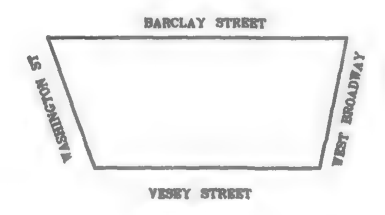

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	7/22/94	REVISED AS NOTED
10	5/25/94	REVISED AS CIRCLED
9	1/26/90	ISSUED FOR BULLETIN NO. 45 -
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REV. AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	NOV. 7, 88	REVISION TO 10/31/88 SUBMISSION
	OCT 31, 88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATION

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43RD FLOOR FRAMING PLAN

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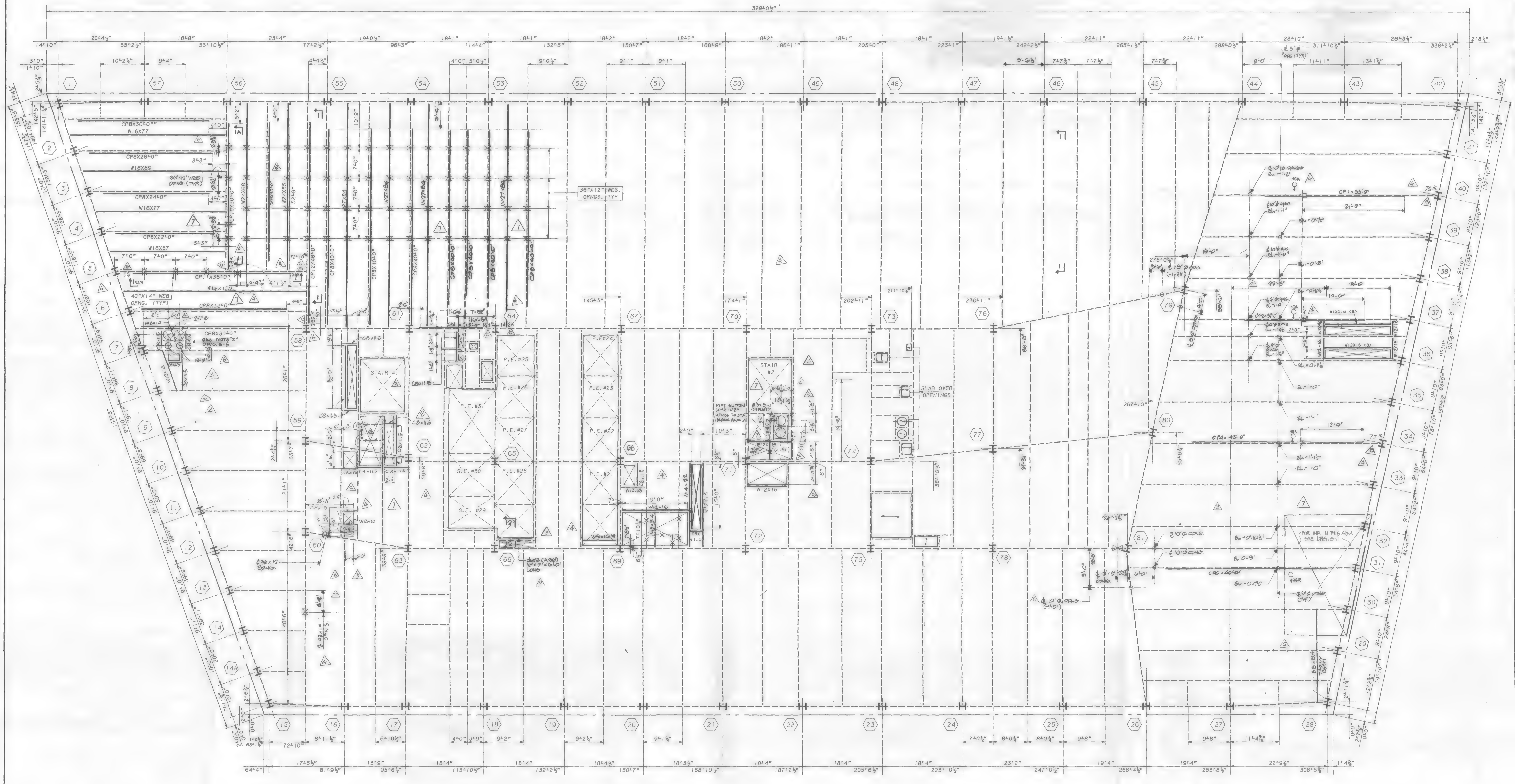

44TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ALL PLUMBING & EL'S TO BE VERIFIED WITH PLUMBING SHOP DWGS. BEFORE PROCEEDING WITH WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. INDICATES NEW STEEL FRAMING.
6. INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N. THUS ± FROM TOP OF STEEL BEAM
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33
12. INDICATES TYPE OF EXISTING CONNECTION REINF. DETAIL, SEE DETAIL ON DWG. S-33

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
9	10/10/89	REVISED AS CIRCLED
8	8/15/89	REVISED AS CIRCLED
7	5/22/89	REVISED AS CIRCLED
6	4/6/89	REVISED AS CIRCLED
5	3/1/89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
3	12/22/88	REVISED AS CIRCLED
2	12/13/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	NOV. 7, 88	REVISION TO 10/31/88 SUBMISSION
	OCT. 31, 88	ISSUED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATION

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44TH FLOOR FRAMING PLAN

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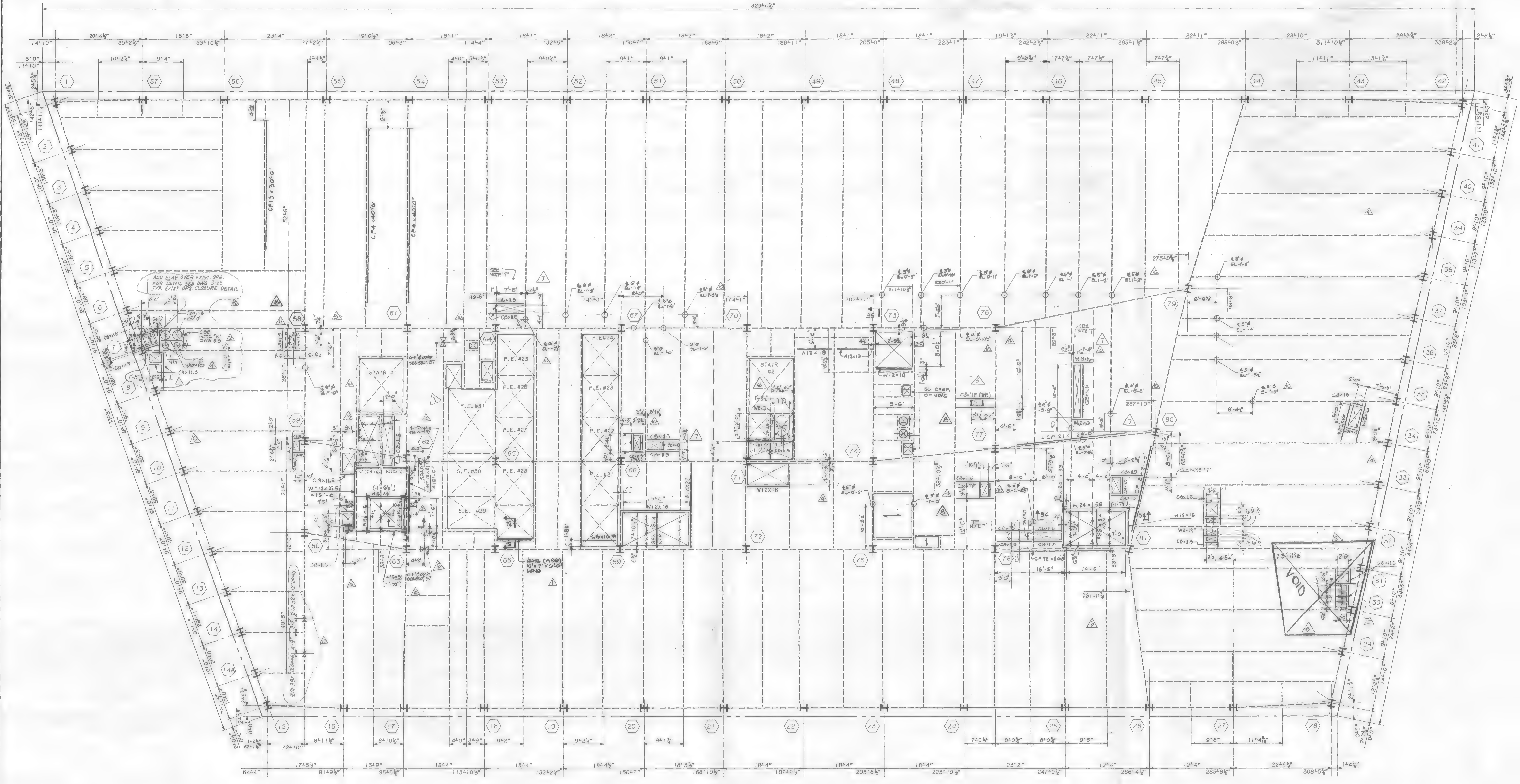
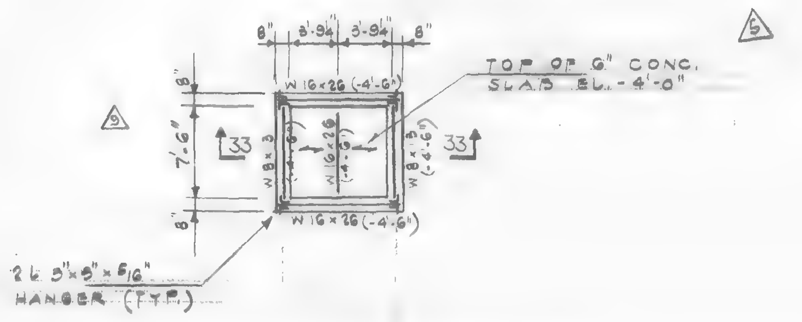
88057/202 S-19



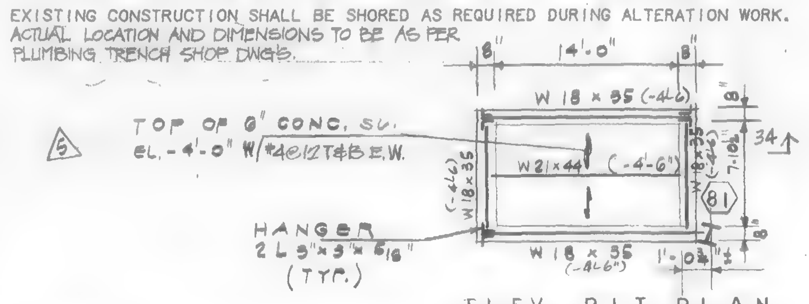
45TH FLOOR FRAMING PLAN



PLAN OF ELEV. PIT

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWG. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.
7. ACTUAL LOCATION AND DIMENSIONS TO BE AS PER PLUMBING TRENCH SHOP DWG'S.



ELEV. PIT PLAN

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —X— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. - - - - INDICATES EXISTING STEEL FRAMING.
7. INDICATES EXISTING SLAB OPENING.
8. INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.

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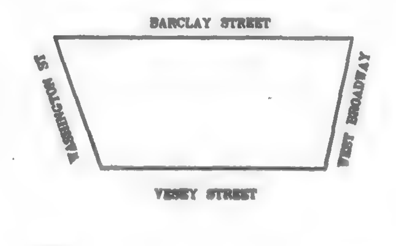

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
12		
11	1/26/90	ISSUED FOR BULLETIN NO. 45
10	10/ /89	REVISED AS CIRCLED
9	8/15/89	REVISED AS CIRCLED
8	8/10/89	ISSUED FOR FIELD SKETCH
7	6/12/89	REVISED AS CIRCLED
6	5/22/89	REVISED AS CIRCLED
5	4/6/89	REVISED AS CIRCLED
4	3/1/89	REVISED AS CIRCLED
3	1/26/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST
2	12/22/88	REV. AS CIRCLED
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	11/21/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

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45TH FLOOR FRAMING PLAN

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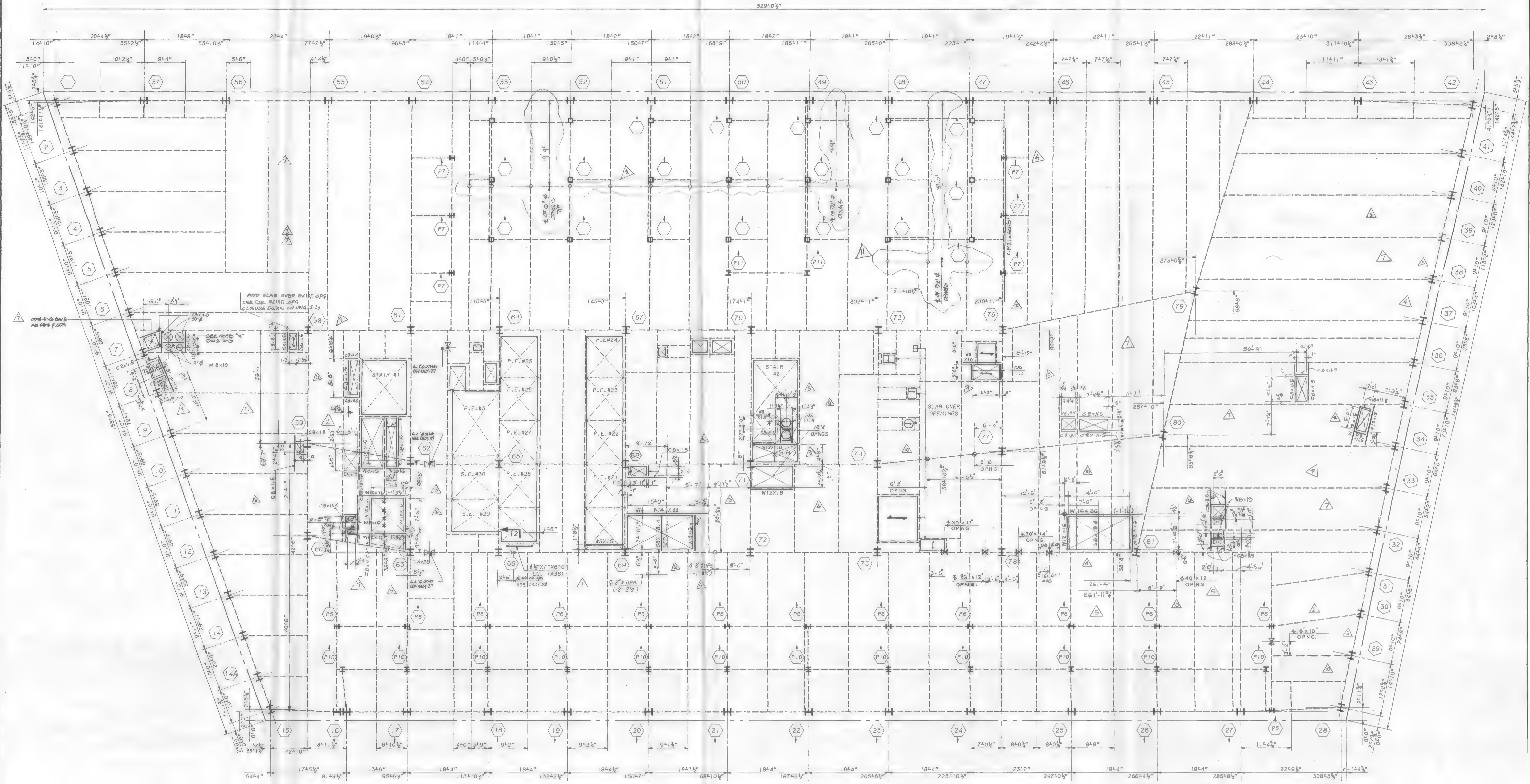

46TH FLOOR FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWGS S-32, S-33
5. ALL BEAM WEB OPENINGS SHALL BE VERIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. <...> INDICATES SHEAR CONNECTORS.
2. [...] INDICATES CAMBER.
3. ⟷ INDICATES DIRECTION OF NEW 2½" CONC. ON 2" 18 GAUGE COMPOSITE METAL DECK OVER EXIST. OPENING.
4. —×— INDICATES PORTION OF EXISTING BEAM TO BE REMOVED AFTER ALL NEW STEEL IS ERECTED OR BEAMS ARE PROPERLY SHORED.
5. ——— INDICATES NEW STEEL FRAMING.
6. – – – – INDICATES EXISTING STEEL FRAMING.
7. ⊠ INDICATES EXISTING SLAB OPENING.
8. ⊠ INDICATES NEW SLAB OPENING.
9. (..N) INDICATES NEW POST OR COLUMN.
10. —⊠— INDICATES BEAM PENETRATION IN WEB ℄ OF PENETRATION SHALL BE AT ℄ OF BEAM U.O.N.
11. CP... INDICATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33

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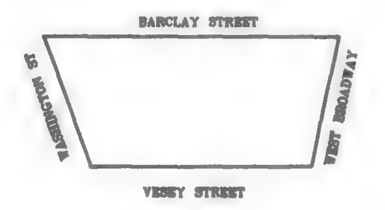

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11		
10	7-3-90	ISSUED FOR BULLENTIN #103
9	4-30-90	COORD FOR FLRS 46 & 47
8	2-23-90	ISSUED FOR BULLETIN NO. 65
7	1/26/90	ISSUED FOR BULLETIN NO 45
6	8/15/89	REVISED AS CIRCLED
5	4-6-89	REVISED AS CIRCLED
4	3-1-89	REVISED AS CIRCLED
3	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST
2	12/22/88	REV. AS CIRCLED
1	12/19/88	REV. AS CIRCLED FOR SHUTTLE ELEV.
	11/21/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE MODIFICATIONS

SOM

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46TH FLOOR FRAMING PLAN

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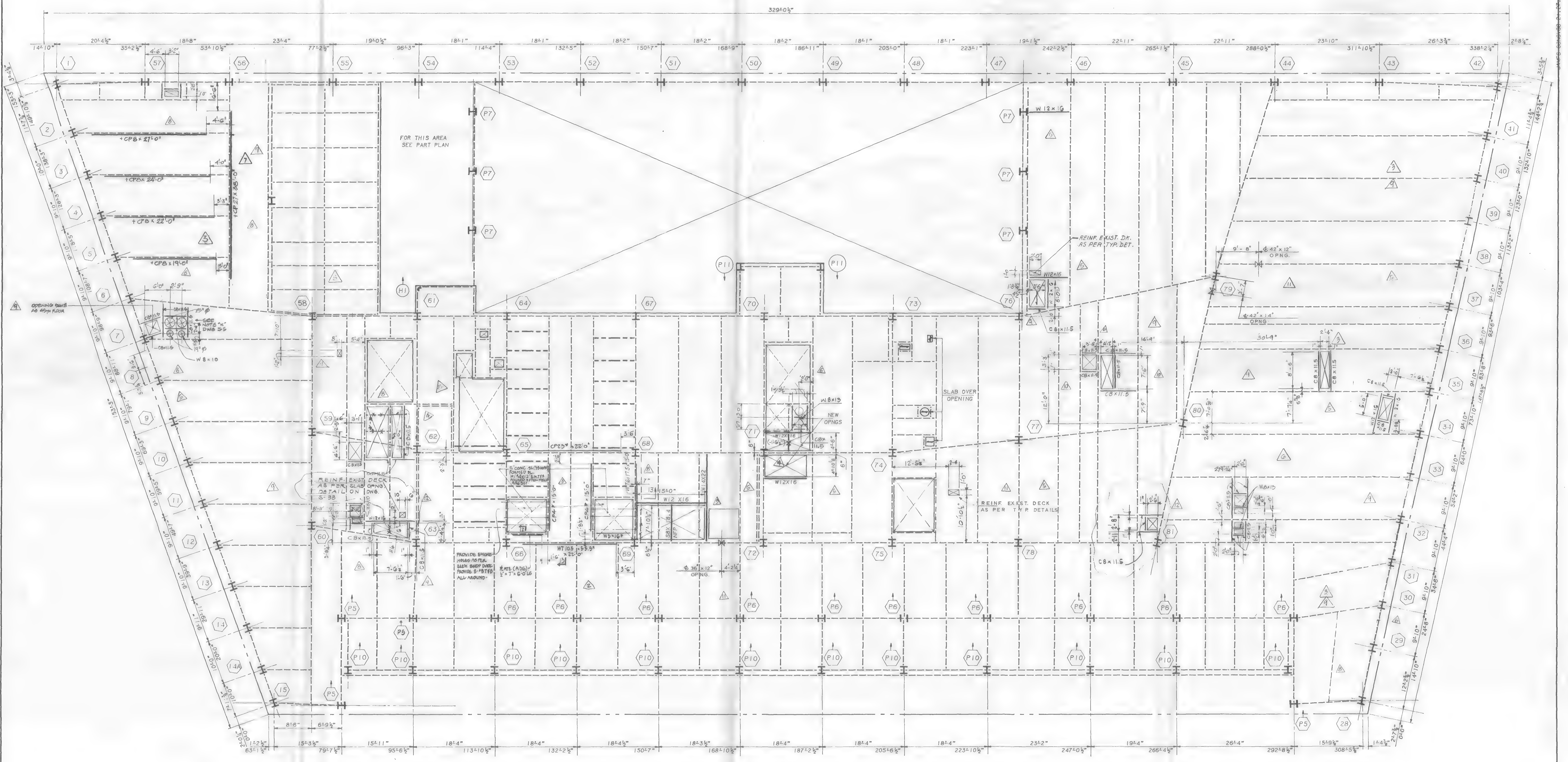

47TH FLOOR FRAMING PLAN

NOTE:
FOR NOTES SEE DWG. S-21

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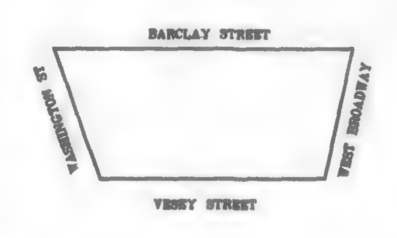

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
12	8-17-90	ISSUED FOR BULLETIN #116
11	7-3-90	ISSUED FOR BULLETIN #103
10	2-23-90	ISSUED FOR BULLETIN NO. 65
9	1-26-90	ISSUED FOR BULLETIN NO. 45
8	8-15-89	REVISED AS CIRCLED
7	5-26-89	REVISED AS CIRCLED
6	4-6-89	REVISED AS CIRCLED
5	3-1-89	REVISED AS CIRCLED
4	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST
3	12/22/88	REV AS CIRCLED
2	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
1	11/21/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS

SOM

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47TH FLOOR FRAMING PLAN

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Project No.:
Date:
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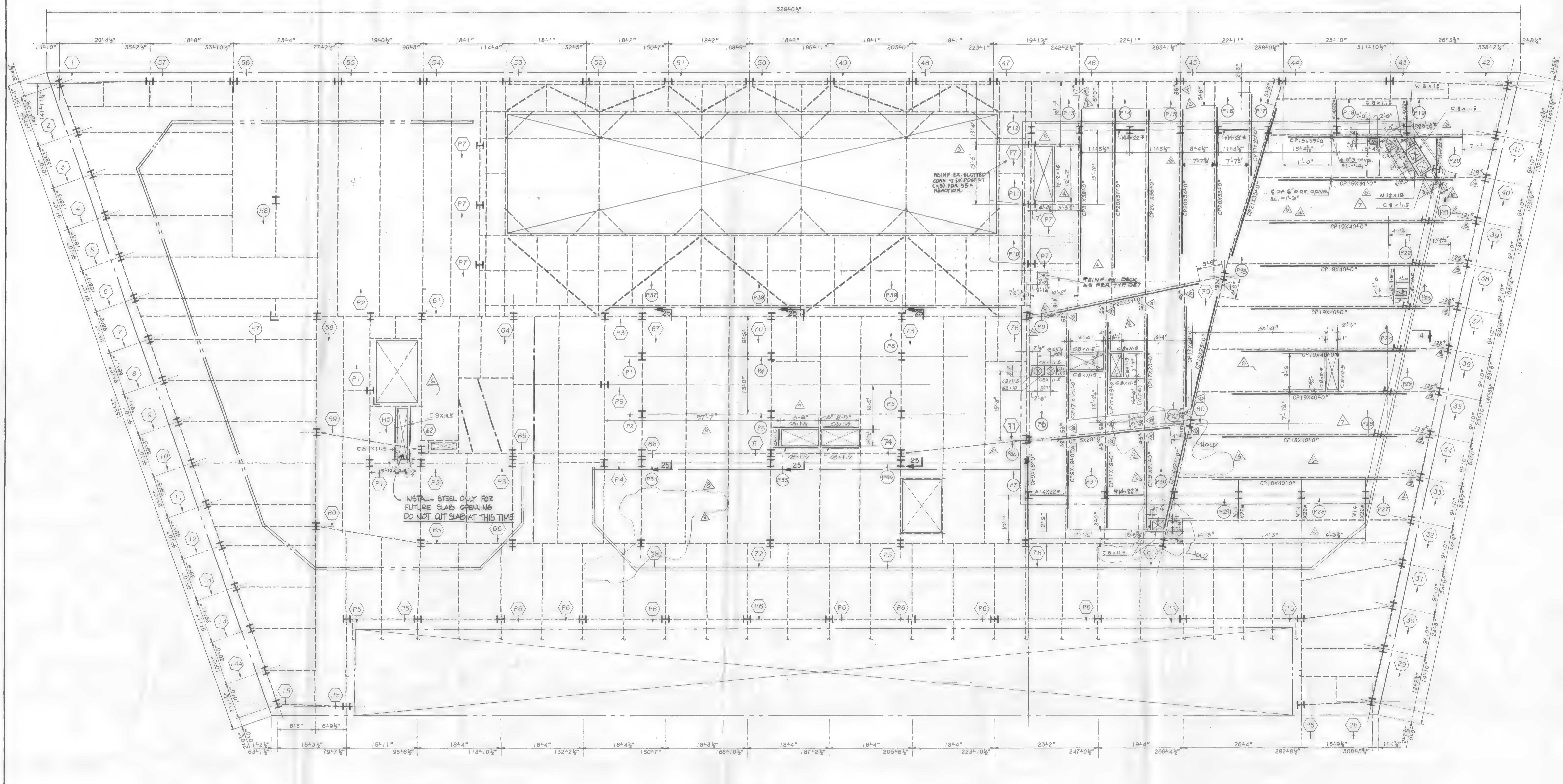
S-22



ROOF FRAMING PLAN

NOTES:

1. TOP OF NEW STEEL SHALL BE 5½" BELOW EXISTING CONC. FLOOR U.O.N. THUS (±---) INDICATING DISTANCE FROM TOP OF EXIST. CONC. BEAM.
2. ALL NEW STEEL SHAPES SHALL BE A-36 U.O.N.
3. ALL NEW BEAM REINFORCING PLATES SHALL BE A-572 GRADE 50 STEEL U.O.N.
4. FOR GENERAL NOTES AND TYPICAL SUPERSTRUCTURE DETAILS, SEE DWGS. S-32, S-33.
5. ALL BEAM WEB OPENINGS SHALL BE VERFIFIED WITH HVAC CONTRACTOR'S SHOP DWGS.
6. EXISTING CONSTRUCTION SHALL BE SHORED AS REQUIRED DURING ALTERATION WORK.

LEGEND:

1. --- INDICATES EXISTING STEEL FRAMING.
2. INDICATES NEW POST GOING UP FROM THIS LEVEL.
3. C.P. INDIÇATES REINF. FOR EXISTING BEAM. FOR SIZE AND DETAILS SEE DWG. S-33.
4. △ INDICATES TYPE OF EXIST. CONNECTION REINF. DETAIL. SEE DETAIL ON DWG. S-33

△2

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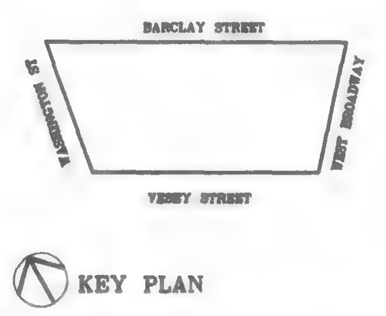

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
9	9-18-90	ISSUED FOR BULLETIN #120
8	8-17-90	ISSUED FOR BULLETIN #110
7	7/3/90	ISSUED FOR BULLETIN #103
6	1/26/90	ISSUED FOR BULLETIN 45
5	8/15/89	REVISED AS CIRCLED
4	4/6/89	REVISED AS CIRCLED
3	3/1/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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ROOF FRAMING PLAN

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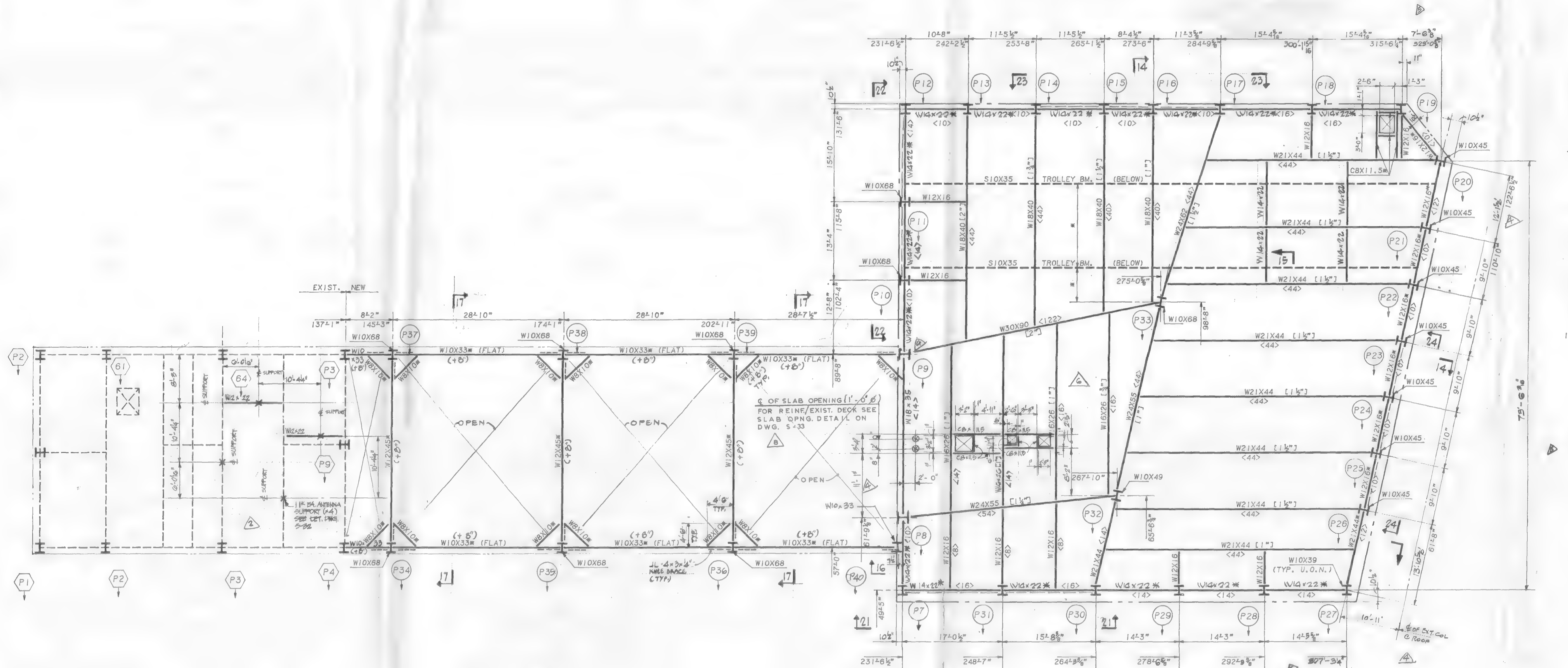
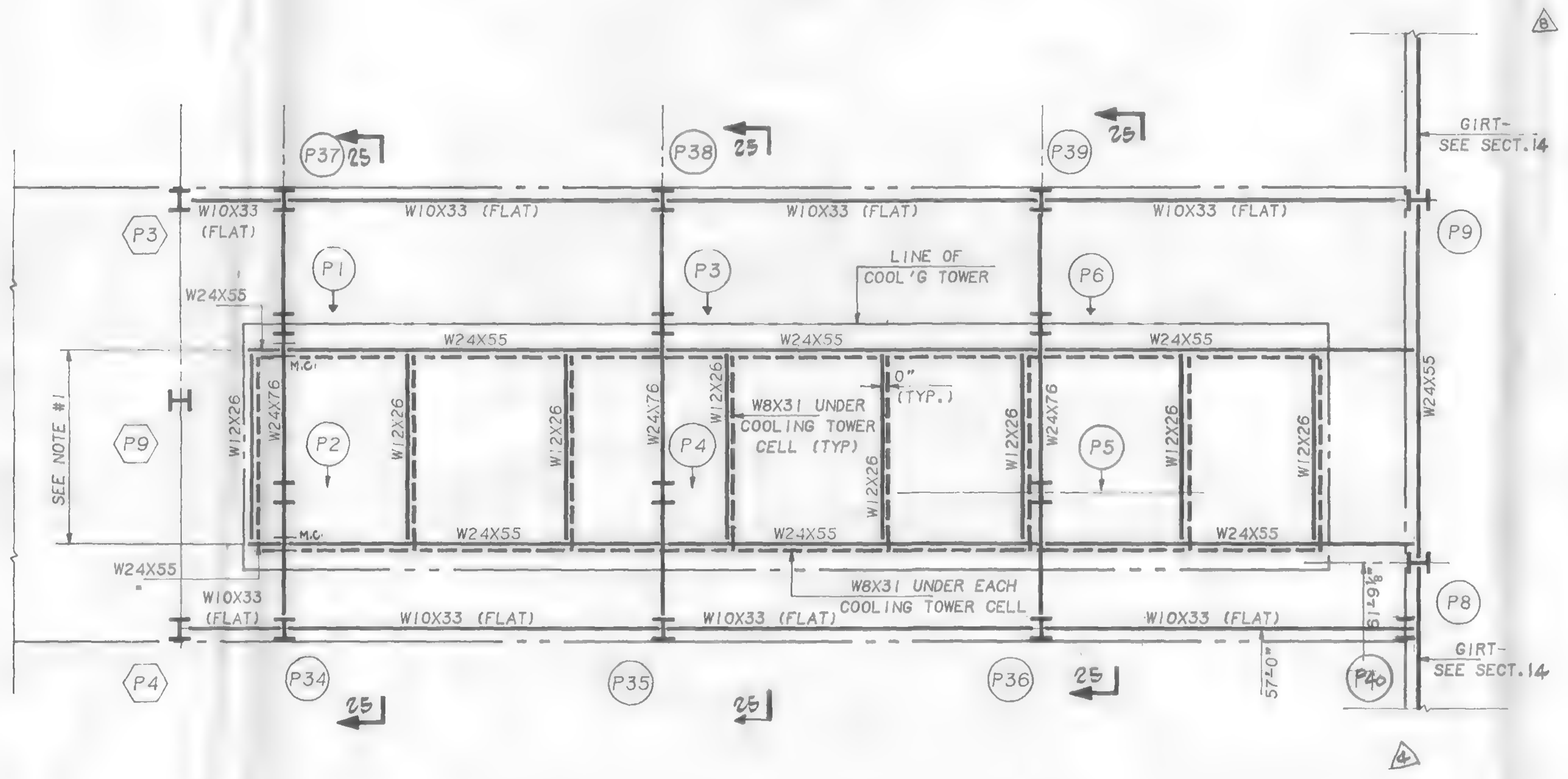


BULKHEAD FRAMING PLAN

NOTES:

1. SLAB SHALL BE 5½" (3"+2½") MIN. THICK STONE CONC. HAVING A COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS PLACED OVER 3" DEEP, 20 GAUGE COMPOSITE METAL DECK REINF. WITH 6X6-W2.4XW2.4 W.W.F. (U.O.N.) WHERE NOTED ON PLAN, TOP OF STRUCTUREAL SLAB SLOPES. H.P. EL. = 946'-6½" AND L.P. EL. = 946'-4" U.O.N. ON PLAN. SEE ARCH. DWGS. FOR SLOPE.
2. TOP OF STEEL SHALL BE AT EL. 945'-10½" UNLESS NOTED THUS (±...) INDICATING DISTANCE ABOVE OR BELOW EL. 946'-4".
3. ALL BEAMS SHALL BE ASTM 572, GRADE 50 STEEL U.O.N. THUS * INDICATING A36 STEEL.
4. FOR TYPICAL SUPERSTRUCTURE DETAILS SEE DWG. S-32 & S-33. FOR SUPERSTRUCTURE GENERAL NOTES SEE DWG. S-32.
5. <...> INDICATES SHEAR CONNECTORS.
6. [...] INDICATES CAMBER.
7. FLOOR SLAB SHALL BE SHORED AS PER MANUFACTURER'S REQUIREMENTS.
8. ALL POSTS SHALL BE W10X39 U.O.N. ON PLAN.
9. (P..) INDICATES NEW POST GOING DOWN.
10. * TROLLEY BEAM LOCATION TO BE COORDINATED WITH CHILLER SHOP DGWS.



COOLING TOWER SUPPORT FRAMING PLAN

NOTES:

1. LOCATION OF COOLING TOWER SUPPORT BEAMS TO BE COORDINATED WITH COOLING TOWER SHOP DRAWINGS.
2. FOR TOP OF STEEL EL. SEE MECHANICAL DWGS.
3. ALL STEEL BEAMS SHALL BE ASTM A36 (fy=36) U.O.N. STEEL BEAMS THUS NOTED (*) IN PLAN SHALL BE ASTM A572 GRADE 50.
4. ALL BOLT HOLES REQUIRED FOR COOLING TOWER SHALL BE PROVIDED AS PER CERTIFIED COOLING TOWER SHOP DWGS.

69.95

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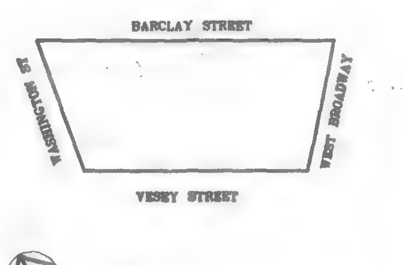

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
	6.9.95	AS BUILT - REF. ISSUE 11.5.93
	11.5.93	ISSUED FOR P. A. REVIEW
8	9-18-90	ISSUED FOR BULLETIN #120
7	8-17-90	ISSUED FOR BULLETIN #116
6	7-3-90	ISSUED FOR BULLETIN #103
5	6/15/89	REVISED AS CIRCLED
4	5-22-89	REVISED AS CIRCLED
3	4/6/89	REVISED AS CIRCLED
2	3/1/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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BULKHEAD
FRAMING PLANS

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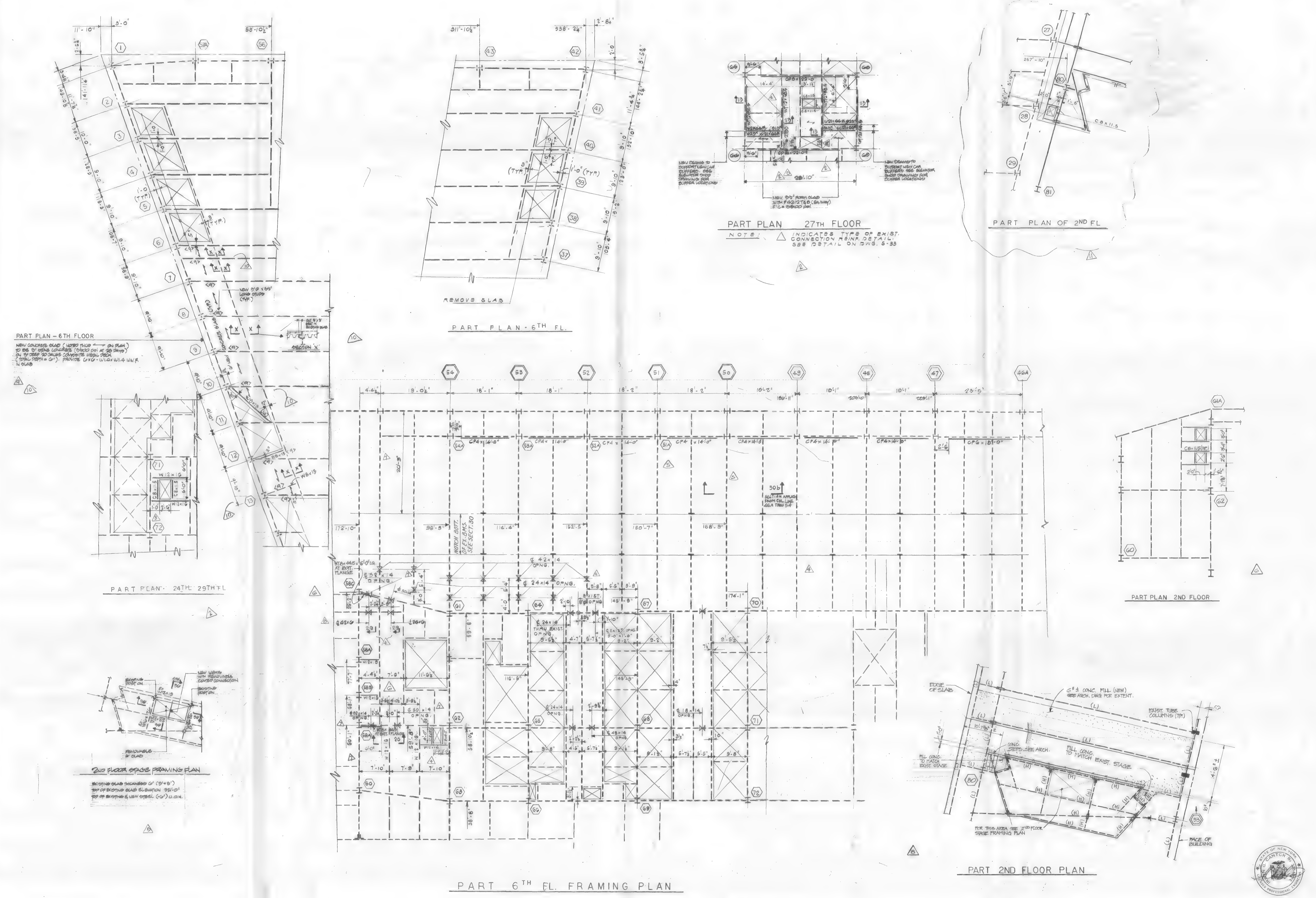

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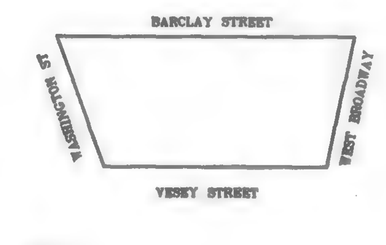

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
11	6-7-90	ISSUED FOR BULLETIN No 94
10	12/8/89	ISSUED BULLETIN No
9	11/22/89	ISSUED BULLETIN NO. 12
8	10/9/89	REVISED AS CIRCLED
7	8/15/89	REVISED AS CIRCLED
6	6-12-89	REVISED AS CIRCLED
5	5-22-89	REVISED AS CIRCLED
4	4-6-89	REVISED AS CIRCLED
	4-4-89	ISSUED TO CON EDISON FOR APPROVAL
3	3/1/89	REVISED AS CIRCLED
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	REVISED AS CIRCLED FOR SHUTTLE ELEV.
	12/19/88	ISSUED TO P.A.

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PART PLANS

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Each cell gives E / N for that column (E = the printed section entry, N = the handwritten entry).

FLOOR \ COL. NO.	1	2	3	4	5	6	7	8
MAIN ROOF								
47TH FL. (14'-10")	W14 X90 / 38	W14 X90 / 31	W14 X90 / 24	W14 X90 / 25	W14 X90 / 62	W14 X109 / 40	W14 X109 / 32	W14 X109 / 30
46TH FL. (12'-9")	X109 / 78	X109 / 74	X109 / 62	X109 / 59	X109 / 145	X145 / 90	X145 / 74	X145 / 69
45TH FL. (12'-9")	W14 / 120	W14 / 113	W14 / 86	W14 / 90	W14 / 216	W14 / 134	W14 / 111	W14 / 103
44TH FL. (12'-9")	X159 / 157	X132 / 153	X132 / 132	X132 / 121	X176 / 257	X176 / 183	X193 / 147	X193 / 136
43RD FL. (12'-9")	W14 / 220	W14 / 222	W14 / 192	W14 / 179	W14 / 451	W14 / 240	W14 / 183	W14 / 170
42ND FL. (12'-9")	X193 / 252	X176 / 252	X176 / 219	X176 / 205	X193 / 508	X193 / 289	X257 / 219	X257 / 203
41ST FL. (12'-9")	W14 / 283	W14 / 282	W14 / 246	W14 / 231	W14 / 566	W14 / 330	W14 / 255	W14 / 236
40TH FL. (12'-9")	X233 / 315	X211 / 312	X211 / 273	X211 / 257	X257 / 623	X257 / 371	X311 / 290	X311 / 269
39TH FL. (12'-9")	W14 / 347	W14 / 341	W14 / 300	W14 / 283	W14 / 680	W14 / 412	W14 / 326	W14 / 303
38TH FL. (12'-9")	X283 / 364	X233 / 355	X233 / 330	X257 / 311	X257 / 744	X311 / 454	X342 / 362	X342 / 336
37TH FL. (12'-9")	W14 / 398	W14 / 387	W14 / 357	W14 / 336	W14 / 801	W14 / 495	W14 / 398	W14 / 369
36TH FL. (12'-9")	X342 / 430	X283 / 416	X283 / 384	X311 / 362	X311 / 859	X342 / 536	X370 / 434	X370 / 402
35TH FL. (12'-9")	W14 / 465	W14 / 461	W14 / 414	W14 / 391	W14 / 916	W14 / 576	W14 / 469	W14 / 435
34TH FL. (12'-9")	X398 / 527	X311 / 543	X311 / 481	X342 / 453	X342 / 1081	X370 / 642	X370 / 505	X370 / 469
33RD FL. (12'-9")	W14 / 587	W14 / 612	W14 / 521	W14 / 493	W14 / 1173	W14 / 683	W14 / 541	W14 / 502
32ND FL. (12'-9")	X455 / 620	X342 / 642	X342 / 548	X342 / 519	X370 / 1281	X370 / 723	X398 / 577	X398 / 535
31ST FL. (12'-9")	W14 / 650	W14 / 672	W14 / 575	W14 / 544	W14 / 1338	W14 / 764	W14 / 613	W14 / 568
EL. 309'-3"	/ 683 (2)	/ 702	/ 602	/ 570	/ 1395	/ 805	/ 648	/ 601
(1ST DIMENSION PARALLEL TO WEB)								
BASE & FLOOR								

FLOOR \ COL. NO.	9	10	11	12	13	14	14A
MAIN ROOF							
47TH FL. (14'-10")	W14 X109 / 27	W14 X109 / 27	W14 X109 / 25	W14 X90 / 24	W14 X90 / 23	W14 X90 / 21	W14 X90 / 18
46TH FL. (12'-9")	X145 / 63	X145 / 61	X145 / 58	X109 / 54	X109 / 50	X109 / 47	X109 / 39
45TH FL. (12'-9")	W14 / 94	W14 / 92	W14 / 89	W14 / 82	W14 / 77	W14 / 72	W14 / 59
44TH FL. (12'-9")	X193 / 125	X193 / 122	X176 / 118	X176 / 109	X132 / 103	X132 / 97	X132 / 80
43RD FL. (12'-9")	W14 / 156	W14 / 152	W14 / 146	W14 / 136	W14 / 128	W14 / 121	W14 / 100
42ND FL. (12'-9")	X257 / 183	X257 / 178	X193 / 171	X193 / 159	X176 / 150	X176 / 143	X176 / 118
41ST FL. (12'-9")	W14 / 209	W14 / 204	W14 / 195	W14 / 182	W14 / 172	W14 / 164	W14 / 136
40TH FL. (12'-9")	X311 / 236	X311 / 230	X257 / 220	X257 / 206	X211 / 194	X211 / 184	X211 / 153
39TH FL. (12'-9")	W14 / 262	W14 / 256	W14 / 245	W14 / 229	W14 / 216	W14 / 205	W14 / 171
38TH FL. (12'-9")	X342 / 288	X342 / 282	X311 / 269	X257 / 253	X257 / 238	X233 / 226	X283 / 188
37TH FL. (12'-9")	W14 / 315	W14 / 308	W14 / 294	W14 / 276	W14 / 260	W14 / 247	W14 / 205
36TH FL. (12'-9")	X370 / 341	X370 / 335	X342 / 319	X311 / 299	X311 / 282	X283 / 268	X283 / 223
35TH FL. (12'-9")	W14 / 367	W14 / 361	W14 / 343	W14 / 323	W14 / 304	W14 / 289	W14 / 240
34TH FL. (12'-9")	X370 / 395	X370 / 390	X370 / 371	X342 / 349	X342 / 329	X311 / 312	X311 / 259
33RD FL. (12'-9")	W14 / 422	W14 / 416	W14 / 396	W14 / 373	W14 / 351	W14 / 332	W14 / 277
32ND FL. (12'-9")	X398 / 452	X398 / 443	X370 / 421	X370 / 396	X342 / 373	X342 / 353	X342 / 294
31ST FL. (12'-9")	W14 / 483	W14 / 469	W14 / 445	W14 / 419	W14 / 395	W14 / 374	W14 / 311
EL. 309'-3"	/ 513 (2)	/ 495	/ 470	/ 443	/ 417	/ 395	/ 329
(1ST DIMENSION PARALLEL TO WEB)							
BASE & FLOOR							

FLOOR \ COL. NO.	15	16	17	17A	18	18A	19	19A	20
MAIN ROOF									
47TH FL. (14'-10")	W14 X90 / 16								
46TH FL. (12'-9")	X109 / 44								
45TH FL. (12'-9")	W14 / 81	W14 X109 / 102	W14 X120 / 97		W14 X159 / 112		W14 X159 / 112		W14 X176 / 110
44TH FL. (12'-9")	X159 / 116	X159 / 152	X159 / 146		X176 / 162		X176 / 162		X211 / 167
43RD FL. (12'-9")	W14 / 150	W14 / 203	W14 / 195		W14 / 212		W14 / 212		W14 / 223
42ND FL. (12'-9")	X193 / 180	X193 / 244	X193 / 235		X211 / 266		X211 / 266		X233 / 272
41ST FL. (12'-9")	W14 / 210	W14 / 286	W14 / 275		W14 / 312		W14 / 312		W14 / 318
40TH FL. (12'-9")	X233 / 240	X233 / 327	X233 / 315		X233 / 366		X233 / 366		X257 / 367
39TH FL. (12'-9")	W14 / 270	W14 / 369	W14 / 355		W14 / 412		W14 / 412		W14 / 414
38TH FL. (12'-9")	X283 / 300	X311 / 410	X311 / 396		X311 / 466		X311 / 466		X311 / 463
37TH FL. (12'-9")	W14 / 330	W14 / 452	W14 / 436		W14 / 512		W14 / 512		W14 / 559
36TH FL. (12'-9")	X342 / 360	X398 / 493	X370 / 476		X370 / 558		X342 / 558		X342 / 556
35TH FL. (12'-9")	W14 / 390	W14 / 534	W14 / 516		W14 / 605		W14 / 605		W14 / 612
34TH FL. (12'-9")	X398 / 424	X455 / 585	X398 / 565		X398 / 661		X370 / 661		X370 / 668
33RD FL. (12'-9")	W14 / 454	W14 / 626	W14 / 605		W14 / 707		W14 / 707		W14 / 714
32ND FL. (12'-9")	X455 / 484	X500 / 668	X426 / 645		X426 / 754		X398 / 754		X398 / 761
31ST FL. (12'-9")	W14 / 514	W14 / 709	W14 / 685		W14 / 800		W14 / 800		W14 / 807
EL. 309'-3"	/ 544	/ 751	/ 726		/ 846		/ 846		/ 853
(1ST DIMENSION PARALLEL TO WEB)									
BASE & FLOOR									

FLOOR \ COL. NO.	21	21A	22	22A	23	23A	24	24A	25	25A	26	27	28	29	30	31	32
MAIN ROOF																	/ 35
47TH FL. (14'-10")													W14 X90 / 5	W14 X90 / 14	W14 X90 / 11	W14 X90 / 31	W14 X90 / 76
46TH FL. (12'-9")													X109 / 29	X109 / 29	X109 / 28	X109 / 70	X109 / 121
45TH FL. (12'-9")	W14 X176 / 110		14 X176 / 110		W14 X176 / 110		W14 X159 / 128		W14 X159 / 128		W14 X120 / 128	W14 X109 / 129	W14 / 93	W14 / 50	W14 / 48	W14 / 127	W14 / 167
44TH FL. (12'-9")	X211 / 167		X211 / 167		X211 / 167		X176 / 192		X176 / 192		X159 / 209	X159 / 153	X159 / 128	X132 / 95	X132 / 91	X132 / 171	X176 / 212
43RD FL. (12'-9")	W14 / 223		W14 / 223		W14 / 223		W14 / 257		W14 / 257		W14 / 291	W14 / 177	W14 / 162	W14 / 140	W14 / 133	W14 / 221	W14 / 256
42ND FL. (12'-9")	X233 / 229		X233 / 229		X233 / 229		X211 / 264		X211 / 264		X193 / 297	X193 / 184	X193 / 195	X176 / 182	X176 / 173	X176 / 263	X193 / 299
41ST FL. (12'-9")	W14 / 285		W14 / 285		W14 / 285		W14 / 328		W14 / 328		W14 / 378	W14 / 209	W14 / 230	W14 / 227	W14 / 215	W14 / 313	W14 / 344
40TH FL. (12'-9")	X257 / 291		X257 / 291		X257 / 291		X233 / 335		X233 / 335		X233 / 394	X233 / 216	X233 / 263	X211 / 269	X211 / 255	X211 / 355	X257 / 387
39TH FL. (12'-9")	W14 / 347		W14 / 347		W14 / 347		W14 / 400		W14 / 400		W14 / 466	W14 / 240	W14 / 297	W14 / 314	W14 / 297	W14 / 406	W14 / 431
38TH FL. (12'-9")	X311 / 353		X145 / 353		X145 / 353		X145 / 407		X311 / 407		X145 / 472	X311 / 247	X283 / 331	X233 / 357	X233 / 337	X283 / 447	X283 / 474
37TH FL. (12'-9")	W14 / 408		W14 / 408		W14 / 408		W14 / 472		W14 / 472		W14 / 553	W14 / 271	W14 / 365	W14 / 401	W14 / 379	W14 / 491	W14 / 519
36TH FL. (12'-9")	X342 / 454		X342 / 454		X342 / 454		X342 / 525		X370 / 525		X370 / 619	X398 / 293	X342 / 396	X283 / 439	X283 / 414	X311 / 532	X311 / 560
35TH FL. (12'-9")	W14 / 510		W14 / 510		W14 / 510		W14 / 589		W14 / 589		W14 / 701	W14 / 317	W14 / 430	W14 / 483	W14 / 456	W14 / 575	W14 / 605
34TH FL. (12'-9")	X370 / 567		X370 / 567		X370 / 567		X370 / 654		X398 / 654		X398 / 782	X455 / 341	X398 / 464	X311 / 527	X311 / 497	X342 / 615	X342 / 649
33RD FL. (12'-9")	W14 / 613		W14 / 613		W14 / 613		W14 / 707		W14 / 707		W14 / 848	W14 / 365	W14 / 495	W14 / 564	W14 / 532	W14 / 655	W14 / 695
32ND FL. (12'-9")	X398 / 659		X398 / 659		X398 / 659		X398 / 760		X426 / 760		X426 / 915	X500 / 385	X455 / 526	X342 / 601	X342 / 567	X342 / 695	X370 / 741
31ST FL. (12'-9")	W14 / 706		W14 / 706		W14 / 706		W14 / 813		W14 / 813		W14 / 981	W14 / 407	W14 / 556	W14 / 638	W14 / 602	W14 / 735	W14 / 787
EL. 309'-3"	/ 752		/ 752		/ 752		/ 867		/ 867		/ 1047	/ 428	/ 587	/ 675	/ 637	/ 775	/ 833
(1ST DIMENSION PARALLEL TO WEB)																	
BASE & FLOOR																	

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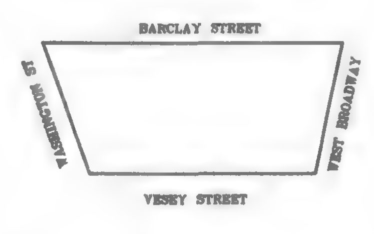

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
2	3/1/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO B.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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COLUMN SCHEDULE # 1

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Project No.:
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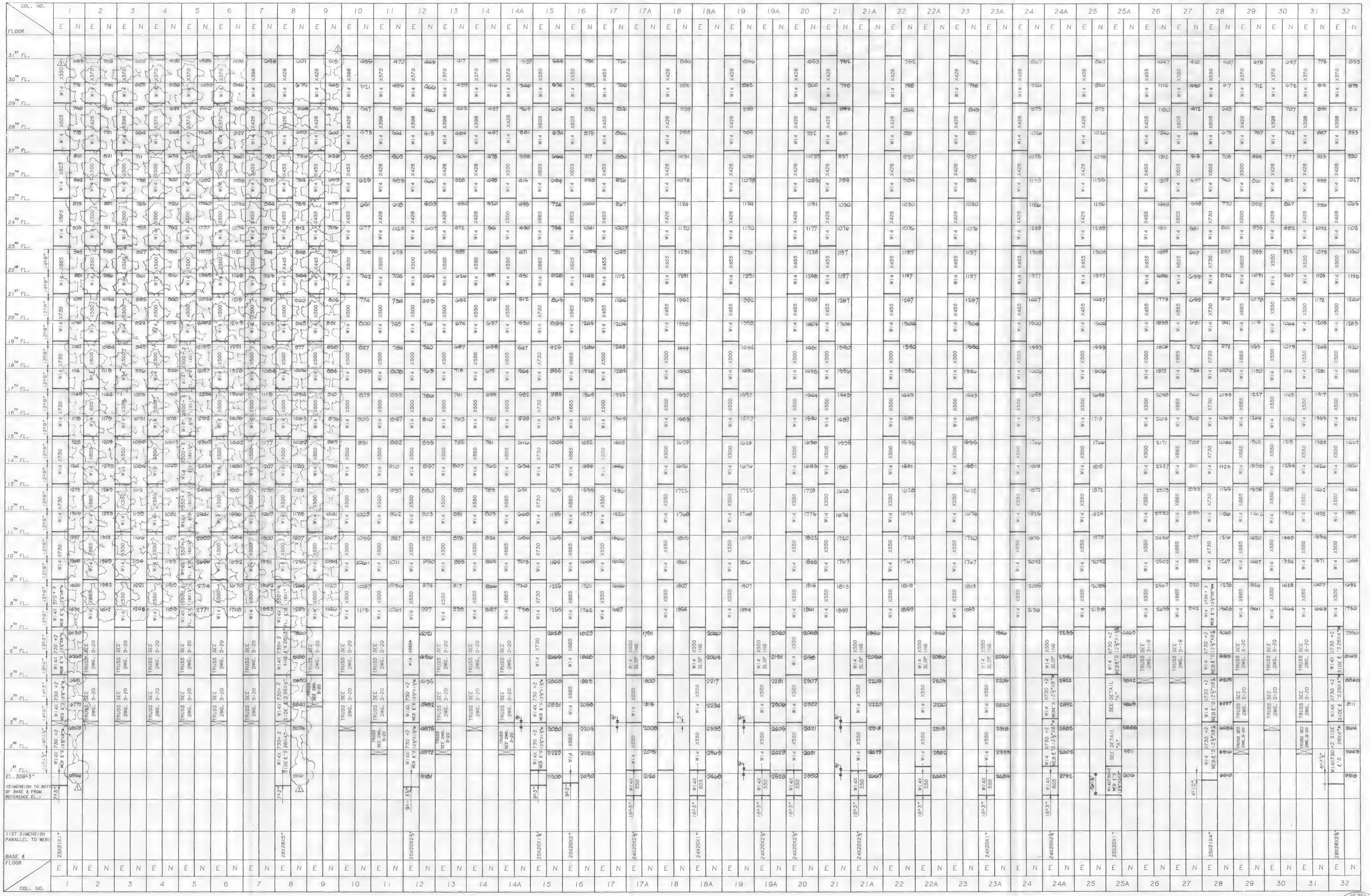

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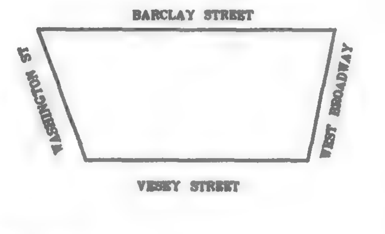

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
	3/11/88	REVISED AS CIRCLED
	1/8/88	ISSUED FOR CONST.
	12/18/87	

SOM

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COLUMN SCHEDULE #2

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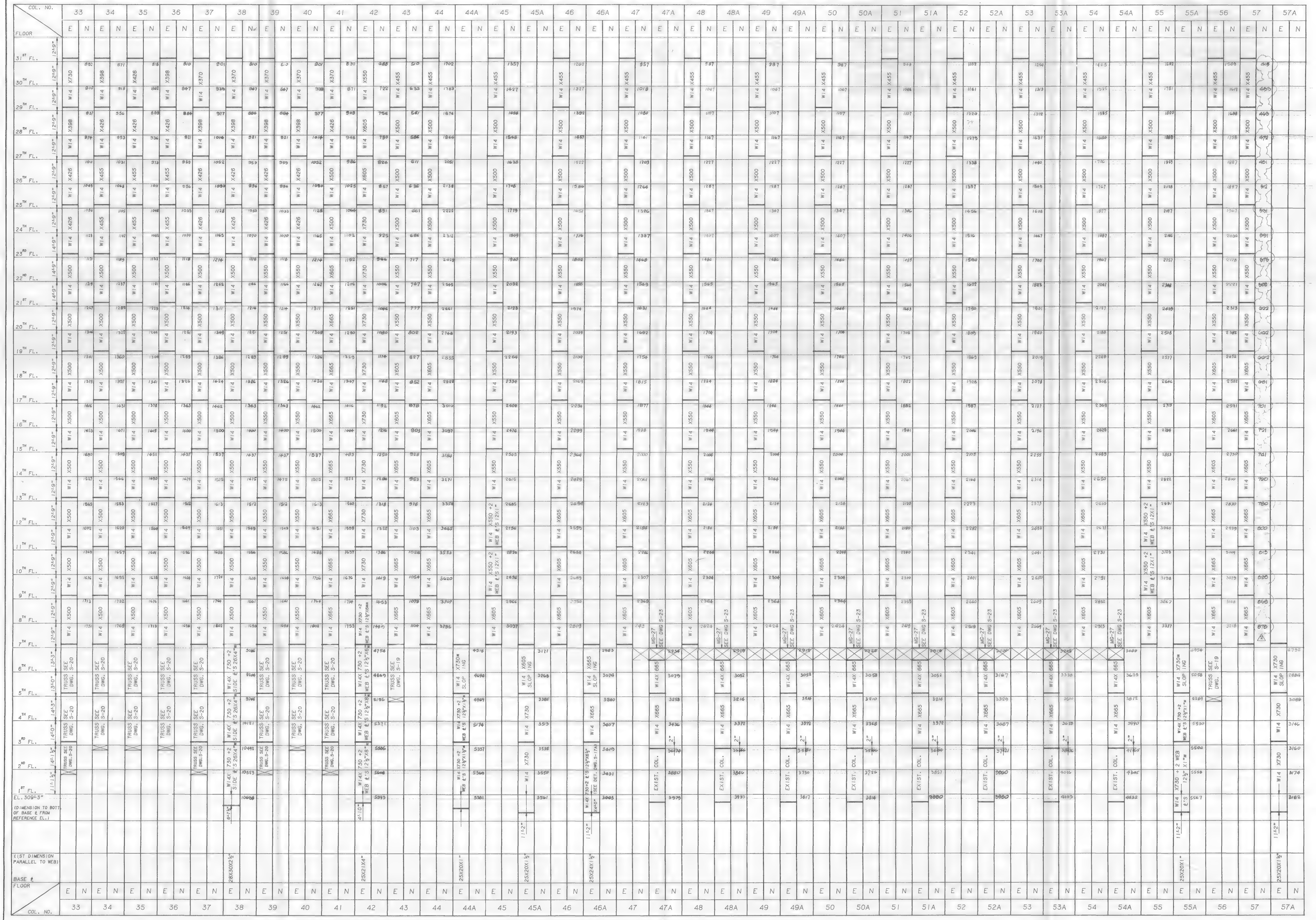
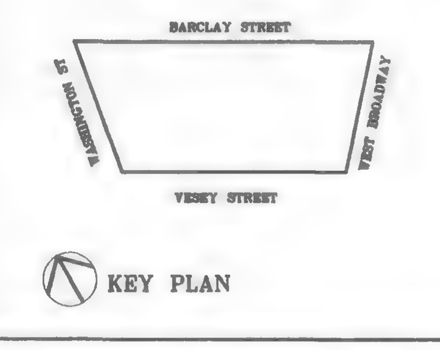
Project No.
Sheet No. S-27
Date
Build

8805



Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048



NOTES

LEGEND

No.	Date	Revision
2	3/1/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/19/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BUILDING MODIFICATIONS

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STATE OF NEW YORK · IRWIN G. CANTOR · No. 32548 · LICENSED PROFESSIONAL ENGINEER

COLUMN SCHEDULE #3

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Project No.:
Date:
Scale:
Sheet No. S-28

88057

WTC1-2-SOM

FLOOR		33 E	33 N	34 E	34 N	35 E	35 N	36 E	36 N	37 E	37 N	38 E	38 N	39 E	39 N	40 E	40 N	41 E	41 N
MAIN ROOF																			
47TH FL.	14'-10"	W14 X109	93	W14 X109	76	W14 X109	76	W14 X109	93	W14 X109	89	W14 X90	93	W14 X90	93	W14 X90	89	W14 X90	88
46TH FL.	12'-9"	X145	137	X145	120	X145	121	X145	137	X145	133	X109	137	X109	137	X109	133	X109	134
45TH FL.	14'-3"	W14	181	W14	166	W14	166	W14	182	W14	180	W14	182	W14	182	W14	180	W14	182
44TH FL.	12'-9"	X176	226	X193	211	X193	211	X193	227	X176	233	X176	227	X132	227	X132	233	X132	228
43RD FL.	12'-9"	W14	271	W14	267	W14	255	W14	272	W14	304	W14	272	W14	272	W14	304	W44	274
42ND FL.	12'-9"	X193	314	X342	310	X342	298	X342	315	X193	347	X193	315	X176	316	X176	347	X176	319
41ST FL.	12'-9"	W14	358	W14	367	W14	343	W14	359	W14	419	W14	359	W14	359	W14	419	W14	365
40TH FL.	12'-9"	X257	401	X311	410	X311	386	X311	402	X257	462	X257	402	X211	402	X211	462	X211	410
39TH FL.	12'-9"	W14	446	W14	466	W14	430	W14	447	W14	533	W14	447	W14	447	W14	533	W14	456
38TH FL.	12'-9"	X311	490	X342	509	X342	473	X342	490	X311	577	X283	490	X283	490	X233	577	X233	500
37TH FL.	12'-9"	W14	535	W14	554	W14	518	W14	534	W14	622	W14	534	W14	534	W14	622	W14	547
36TH FL.	12'-9"	X342	572	X370	591	X370	555	X370	572	X370	660	X311	572	X311	572	X283	660	X283	585
35TH FL.	12'-9"	W14	616	W14	636	W14	600	W14	616	W14	705	W14	616	W14	616	W14	705	W14	631
34TH FL.	12'-9"	X370	661	X370	680	X370	644	X370	661	X370	750	X342	661	X342	661	X311	750	X311	678
33RD FL.	12'-9"	W14	709	W14	728	W14	688	W14	698	W14	788	W14	698	W14	698	W14	788	W14	716
32ND FL.	12'-9"	X370	756	X398	776	X398	731	X398	735	X370	826	X370	735	X342	735	X342	826	X342	755
31ST FL.	14'-9"	W14	804	W14	824	W14	775	W14	773	W14	863	W14	773	W14	773	W14	863	W14	793

FLOOR		42 E	42 N	43 E	43 N	44 E	44 N	44A E	44A N	45 E	45 N	45A E	45A N	46 E	46 N	46A E	46A N	47 E	47 N	47A E	47A N
MAIN ROOF																					
47TH FL.	14'-10"	W14 X90	60	W14 X99	44	W14 X99	276			W14 X99	207			W14 X99	199			W14 X120	20		
46TH FL.	12'-9"	X109	103	X120	75	X120	378			X120	289			X120	276			X159	26		
45TH FL.	14'-3"	W14	148	W14	105	W14	487			W14	374			W14	356			W14	108		
44TH FL.	12'-9"	X159	180	X145	133	X145	595			X159	460			X159	436			X176	177		
43RD FL.	12'-9"	W14	217	W14	161	W14	703 1-SOUTH SIDE PL. 12¾ x ½			W14	546			W14	516			W14	253		
42ND FL.	12'-9"	X193	254	X159	189	X159*	710			X193	556			X193	523			X233	259		
41ST FL.	12'-9"	W14	292	W14	217	W14	819			W14	642			W14	603			W14	335		
40TH FL.	12'-9"	X233	329	X193	244	X193*	826			X233	653			X233	610			X283	341		
39TH FL.	12'-9"	W14	367	W14	272	W14	934			W14	738			W14	690			W14	416		
38TH FL.	12'-9"	X283	404	X257	300	X257	941			X283	749			X283	697			X311	422		
37TH FL.	12'-9"	W14	442	W14	328	W14	1050			W14	835			W14	777			W14	498		
36TH FL.	12'-9"	X342	476	X283	357	X283	1137			X311	905			X311	842			X342	559		
35TH FL.	12'-9"	W14	514	W14	381	W14	1245			W14	990			W14	922			W14	635		
34TH FL.	12'-9"	X398	552	X370	410	X370	1353			X370	1076			X370	1002			X398	711		
33RD FL.	12'-9"	W14	586	W14	435	W14	1441			W14	1146			W14	1067			W14	772		
32ND FL.	12'-9"	X455	620	X426	460	X426	1528			X426	1216			X426	1138			X426	834		
31ST FL.	14'-9"	W14	654	W14	485	W14	1615			W14	1287			W14	1197			W14	895		

FLOOR		48 E	48 N	48A E	48A N	49 E	49 N	49A E	49A N	50 E	50 N	50A E	50A N	51 E	51 N	51A E	51A N	52 E	52 N	52A E	52A N
MAIN ROOF																					
47TH FL.	14'-10"	W14 X120	15			W14 X120	15			W14 X120	15			W14 X120	16			W14 X120	14		
46TH FL.	12'-9"	X159	21			X176	21			X176	21			X176	22			X159	20		
45TH FL.	14'-3"	W14	136			W14	136			W14	136			W14	137			W14	134		
44TH FL.	12'-9"	X176	226			X233	226			X233	226			X233	226			X176	224		
43RD FL.	12'-9"	W14	300			W14	300			W14	300			W14	300			W14	296		
42ND FL.	12'-9"	X233	306			X283	306			X283	306			X283	335			X233	363		
41ST FL.	12'-9"	W14	380			W14	380			W14	380			W14	381			W14	422		
40TH FL.	12'-9"	X283	386			X311	386			X311	386			X311	416			X283	489		
39TH FL.	12'-9"	W14	459			W14	459			W14	459			W14	463			W14	548		
38TH FL.	12'-9"	X311	465			X342	465			X342	465			X342	498			X311	615		
37TH FL.	12'-9"	W14	539			W14	539			W14	539			W14	571			W14	674		
36TH FL.	12'-9"	X342	599			X370	599			X370	599			X370	631			X342	733		
35TH FL.	12'-9"	W14	673			W14	673			W14	673			W14	676			W14	793		
34TH FL.	12'-9"	X398	747			X398	747			X398	747			X398	749			X398	865		
33RD FL.	12'-9"	W14	807			W14	807			W14	807			W14	809			W14	925		
32ND FL.	12'-9"	X426	867			X426	867			X426	867			X426	869			X426	984		
31ST FL.	14'-9"	W14	927			W14	927			W14	927			W14	928			W14	1043		

FLOOR		53 E	53 N	53A E	53A N	54 E	54 N	54A E	54A N	55 E	55 N	55A E	55A N	56 E	56 N	57 E	57 N	57A E	57A N
MAIN ROOF																			
47TH FL.	14'-10"	W14 X120	54			W14 X120	306			14 X99	74			W14 X99	75	W14 X99	20		
46TH FL.	12'-9"	X159	76			X120	395			X120	366			X120	157	X120	44		
45TH FL.	14'-3"	W14	291			W14	470			W14	451			W14	243	W14	68		
44TH FL.	12'-9"	X176	380			X159	544			X159	536			X145	329	X145	91		
43RD FL.	12'-9"	W14	453			W14	648			W14	689			W14	517	W14	130		
42ND FL.	12'-9"	X233	519			X193	708			X193	758			X159*	587	X159	150		
41ST FL.	12'-9"	W14	578			W14	768			W14	827			W14	657	W14	170		
40TH FL.	12'-9"	X283	643			X233	829			X233	896			X193	726	X193	190		
39TH FL.	12'-9"	W14	702			W14	889			W14	965			W14	796	W14	210		
38TH FL.	12'-9"	X311	768			X283	926			X283	1042			X257	873	X257	230		
37TH FL.	12'-9"	W14	827			W14	986			W14	1111			W14	943	W14	250		
36TH FL.	12'-9"	X342	886			X311	1067			X311	1180			X283	1012	X283	270		
35TH FL.	12'-9"	W14	945			W14	1106			W14	1249			W14	1082	W14	290		
34TH FL.	12'-9"	X398	1018			X370	1209			X370	1402			X370	1270	X370	328		
33RD FL.	12'-9"	W14	1077			W14	1283			W14	1475			W14	1340	W14	354		
32ND FL.	12'-9"	X426	1136			X426	1344			X426	1544			X426	1410	X426	374		
31ST FL.	14'-9"	W14	1195			W14	1404			W14	1613			W14	1479	W14	394 △2		

EL. 309'-3"

(DIMENSION TO BOTT. OF BASE ℄ FROM REFERENCE EL.)

(1ST DIMENSION PARALLEL TO WEB)

BASE ℄

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

KEY PLAN: BARCLAY STREET, WEST BROADWAY, VESEY STREET, WASHINGTON ST.

NOTES

LEGEND

No.	Date	Revision
2	3/1/88	REVISED AND ISSUED
1	1/8/88	ISSUED FOR CONST.
1	[illegible]	[illegible]

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COLUMN SCHEDULE #4

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Project No.: | Sheet No.: S-29
Date:
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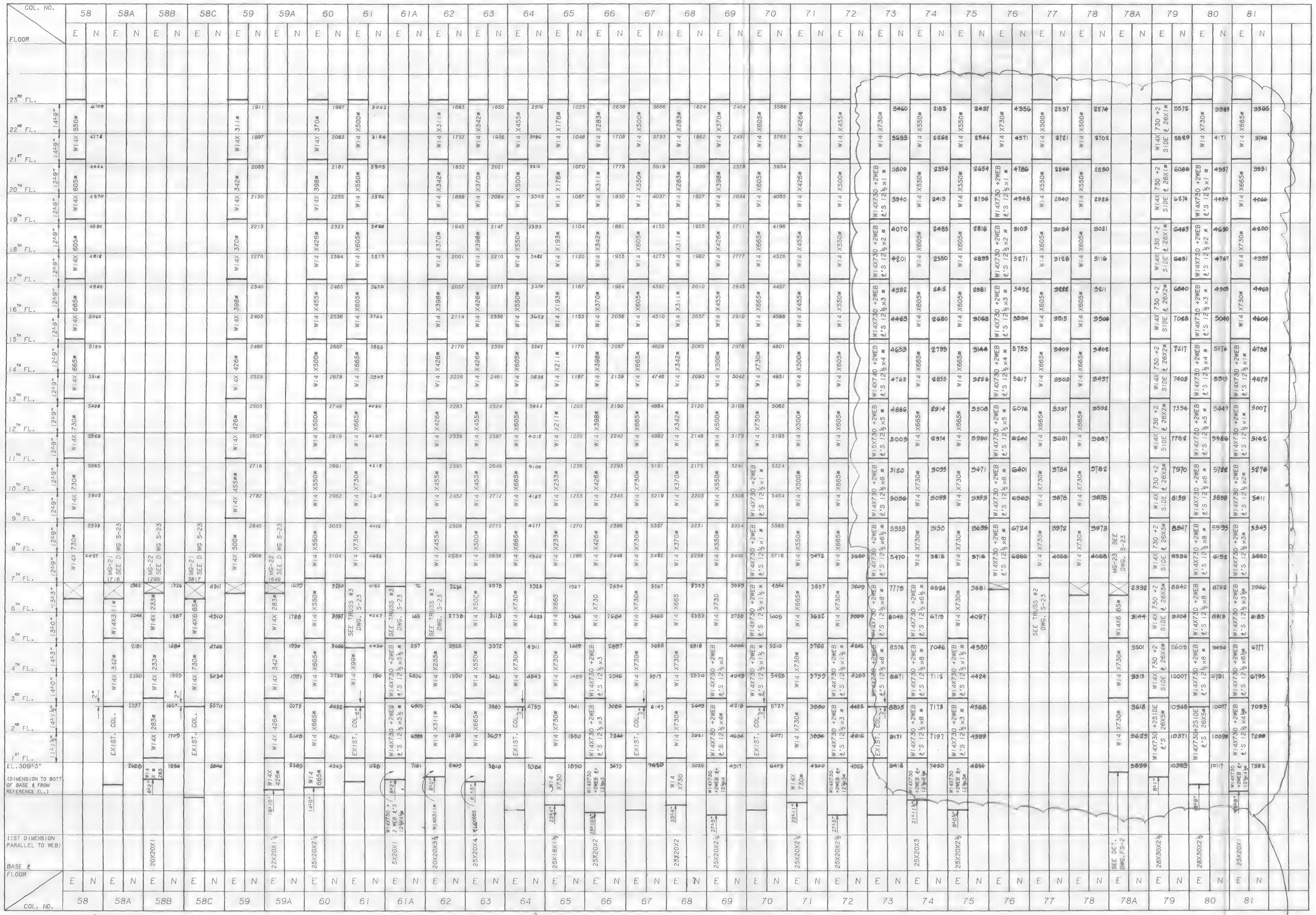
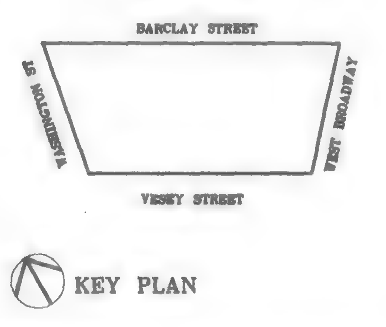
WTCI-2-SOM





NOTES

LEGEND

No.	Date	Revision
2	3/1/89	REVISED AS CIRCLED
	1/13/89	ISSUED FOR CONST.
1	12/19/88	

SOM

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Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
NEW YORK, NEW YORK 10048

COLUMN SCHEDULE #5

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Project No: | Sheet No: S-30
Date:
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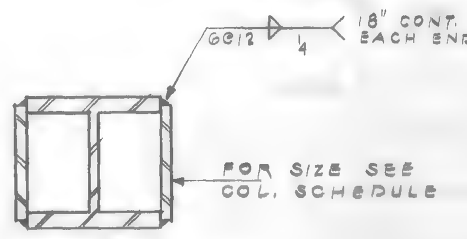
38057



TYPICAL SIDE PLATE REINFORCING DETAIL

NOTE:
1. - REMOVE EXIST. CONNECTIONS AT 39, 41 & 43RD FL.'S AS REQ'D.
2. - EXTEND COLUMN REINF. AS CLOSE AS POSSIBLE TO THE UNDERSIDE OF EXIST. BEAM AND/OR TOP OF EXIST. SLAB.
3. AT SPLICE LOCATIONS CUT REINFORCING PLATE AS REQUIRED & EXTEND MINIMUM 18" INTO COLUMN BELOW WELD CONT. AS SHOWN ABOVE.

FLOOR / COL. NO.	58 E	58 N	59 E	59 N	60 E	60 N	61 E	61 N	62 E	62 N	63 E	63 N	64 E	64 N	65 E	65 N
BULKHEAD ROOF – MAIN ROOF							W14 X90#	31		29			W14 X90#	35		35
MAIN ROOF – 47TH FL. (14'-10")	W14 X99#	154	W14 X90#	97	W14 X90#	63		170	W14 X90#	134	W14 X90#	86		186	W14 X90#	225
47TH – 46TH FL. (12'-9")	W14 X109#	553	W14 X90#	183	W14 X90#	135	W14 X99#	435	W14 X90#	229	W14 X90#	184	W14 X99#	408	W14 X90#	602
46TH – 45TH FL. (12'-9")		711		264		251		552		300		310		556		624
45TH – 44TH FL. (12'-9")	W14 X145#	902	W14 X99#	344	W14 X99#	342	W14 X132#	695	W14 X99#	387	W14 X99#	390	W14 X120#	669	W14 X90#	645
44TH – 43RD FL. (12'-9")		1128		425		432		887		437		470		884		666
43RD – 42ND FL. (12'-9")	W14 X193#	1262	W14 X109#	495	W14 X109#	503	W14 X159#	978	W14 X109#	497	W14 X109#	535	W14 X145#	973	W14 X99#	683
42ND – 41ST FL. (12'-9")		1395		565		574		1070		557		601		1061		699
41ST – 40TH FL. (12'-9")	W14 X233#	1529	W14 X132#	635	W14 X132#	645	W14 X193#	1161	W14 X132#	616	W14 X132#	666	W14 X176#	1149	W14 X99#	716
40TH – 39TH FL. (12'-9")		1663		706		716		1253		676		731		1238		732
39TH – 38TH FL. (12'-9")	W14 X283#	1807	W14 X145#	776	W14 X159#	787	W14 X211#	1367	W14 X145#	736	W14 X159#	798	W14 X211#	1326	W14 X109#	749
38TH – 37TH FL. (12'-9")		1941		846		858		1461		795		861		1417		766
37TH – 36TH FL. (12'-9")	W14 X311#	2076	W14 X159#	922	W14 X193#	932	W14 X233#	1552	W14 X159#	854	W14 X176#	926	W14 X257#	1506	W14 X109#	782
36TH – 35TH FL. (12'-9")		2209		992		1003		1644		914		992		1694		799
35TH – 34TH FL. (12'-9")	W14 X370#	2435	W14 X193#	1072	W14 X211#	1094	W14 X283#	1835	W14 X176#	988	W14 X193#	1074	W14 X283#	1789	W14 X120#	820
34TH – 33RD FL. (12'-9")		2661		1147		1168		2027		1044		1137		1971		837
33RD – 32ND FL. (12'-9")	W14 X426#	2795	W14 X211#	1222	W14 X233#	1242	W14 X342#	2119	W14 X193#	1100	W14 X211#	1200	W14 X311#	2059	W14 X132#	853
32ND – 31ST FL. (12'-9")		2979		1297		1316		2210		1157		1263		2146		870
31ST – 30TH FL. (12'-9")	W14 X455#	3063	W14 X233#	1372	W14 X257#	1390	W14 X370#	2301	W14 X211#	1213	W14 X233#	1325	W14 X342#	2236	W14 X145#	886
30TH – 29TH FL. (12'-9")		3197		1446		1464		2393		1270		1388		2324		903
29TH – 28TH FL. (12'-9")	W14 X500#	3321	W14 X257#	1509	W14 X283#	1535	W14 X398#	2484	W14 X233#	1326	W14 X257#	1451	W14 X370#	2418	W14 X145#	920
28TH – 27TH FL. (12'-9")		3444		1573		1606		2576		1383		1514		2501		936
27TH – 26TH FL. (12'-9")	W14 X500#	3568	W14 X283#	1635	W14 X311#	1678	W14 X426#	2667	W14 X257#	1439	W14 X283#	1577	W14 X398#	2590	W14 X159#	953
26TH – 25TH FL. (12'-9")		3692		1699		1748		2758		1495		1640		2678		969
25TH – 24TH FL. (12'-9")	W14 X550#	3816	W14 X311#	1762	W14 X342#	1819	W14 X455#	2850	W14 X283#	1551	W14 X311#	1702	W14 X426#	2767	W14 X159#	986
24TH – 23RD FL. (14'-9")		3940		1825		1890		2941		1608		1765		2855		1003
BELOW 23RD FL.		4109		1911		1987		3062		1683		1850		2976		1025

FLOOR / COL. NO.	66 E	66 N	67 E	67 N	68 E	68 N	69 E	69 N	70 E	70 N	71 E	71 N	72 E	72 N	73 E	73 N
BULKHEAD ROOF – MAIN ROOF		11														
MAIN ROOF – 47TH FL. (14'-10")	W14 X90#	85	W14 X90#	159	W14 X90#	194	W14 X90#	69	W14 X99#	138	W14 X90#	134	W14 X90#	87	W14 X90#	145
47TH – 46TH FL. (12'-9")	W14 X90#	236	W14 X99#	367	W14 X90#	510	W14 X90#	183	W14 X99#	216	W14 X90#	256	W14 X99#	217	W14 X109#	223
46TH – 45TH FL. (12'-9")		356		595		618		342		444		363		398		432
45TH – 44TH FL. (12'-9")	W14 X99#	422	W14 X132#	730	W14 X99#	668	W14 X99#	434	W14 X132#	605	W14 X99#	467	W14 X120#	524	W14 X145#	596
44TH – 43RD FL. (12'-9")		487		866		733		527		774		599		635		762
43RD – 42ND FL. (12'-9")	W14 X109#	543	W14 X159#	1014	W14 X109#	783	W14 X109#	632	W14 X159#	834	W14 X132#	731	W14 X132#	675	W14 X176#	782
42ND – 41ST FL. (12'-9")		599		1150		834		725		984		852		798		953
41ST – 40TH FL. (12'-9")	W14 X132#	655	W14 X193#	1297	W14 X132#	884	W14 X132#	830	W14 X193#	1026	W14 X159#	956	W14 X159#	837	W14 X211#	970
40TH – 39TH FL. (12'-9")		712		1433		935		923		1200		1077		957		1141
39TH – 38TH FL. (12'-9")	W14 X145#	768	W14 X233#	1569	W14 X159#	985	W14 X159#	1016	W14 X257#	1252	W14 X193#	1182	W14 X193#	998	W14 X257#	1277
38TH – 37TH FL. (12'-9")		824		1704		1039		1109		1412		1286		1108		1408
37TH – 36TH FL. (12'-9")	W14 X159#	880	W14 X283#	1991	W14 X176#	1159	W14 X193#	1182	W14 X342#	1648	W14 X233#	1483	W14 X233#	1197	W14 X342#	1538
36TH – 35TH FL. (12'-9")		938		2109		1211		1275		1807		1570		1308		1668
35TH – 34TH FL. (12'-9")	W14 X176#	1001	W14 X311#	2228	W14 X193#	1264	W14 X211#	1368	W14 X370#	1968	W14 X257#	1657	W14 X283#	1418	W14 X398#	1832
34TH – 33RD FL. (12'-9")		1053		2346		1305		1481		2099		1727		1506		1963
33RD – 32ND FL. (12'-9")	W14 X193#	1104	W14 X342#	2464	W14 X211#	1347	W14 X233#	1554	W14 X398#	2230	W14 X283#	1798	W14 X311#	1594	W14 X455#	2094
32ND – 31ST FL. (12'-9")		1156		2582		1388		1647		2361		1868		1682		2245
31ST – 30TH FL. (12'-9")	W14 X211#	1207	W14 X370#	2700	W14 X233#	1429	W14 X257#	1740	W14 X426#	2491	W14 X311#	1939	W14 X342#	1770	W14 X500#	2355
30TH – 29TH FL. (12'-9")		1259		2831		1621		1919		2624		2090		1939		2486
29TH – 28TH FL. (12'-9")	W14 X233#	1310	W14 X398#	2949	W14 X257#	1649	W14 X283#	1985	W14 X455#	2755	W14 X342#	2151	W14 X370#	2018	W14 X550#	2617
28TH – 27TH FL. (12'-9")		1362		3068		1676		2052		2886		2213		2097		2747
27TH – 26TH FL. (12'-9")	W14 X257#	1413	W14 X426#	3186	W14 X257#	1704	W14 X311#	2118	W14 X500#	3016	W14 X370#	2274	W14 X398#	2176	W14 X605#	2878
26TH – 25TH FL. (12'-9")		1465		3304		1731		2184		3147		2336		2255		3009
25TH – 24TH FL. (12'-9")	W14 X283#	1516	W14 X455#	3422	W14 X283#	1759	W14 X342#	2251	W14 X550#	3278	W14 X398#	2397	W14 X426#	2334	W14 X665#	3130
24TH – 23RD FL. (14'-9")		1568		3540		1787		2317		3409		2485		2413		3273
BELOW 23RD FL.		1638		3666		1824		2404		3588		2680		2585		3460

FLOOR / COL. NO.	74 E	74 N	75 E	75 N	76 E	76 N	77 E	77 N	78 E	78 N	79 E	79 N	80 E	80 N	81 E	81 N
BULKHEAD ROOF – MAIN ROOF																
MAIN ROOF – 47TH FL. (14'-10")	W14 X90#	132	W14 X90#	64	W14 X90#	376	W14 X90#	205	W14 X90#	94	W14 X99#	624	W14 X90#	395	W14 X90#	118
47TH – 46TH FL. (12'-9")	W14 X90#	236	W14 X99#	183	W14 X120#	582	W14 X90#	329	W14 X90#	220	W14 X132	928	W14 X99#	616	W14 X99#	296
46TH – 45TH FL. (12'-9")		328		298		839		445		392		1166 2-SIDE PL'S 12¾"x½"		790 2-SIDE PL'S 12¾"x½"		505
45TH – 44TH FL. (12'-9")	W14 X99#	420	W14 X109#	413	W14 X159#	1033	W14 X99#	562	W14 X99#	511	W14 X193#	1406	W14 X145#	983	W14 X145#	661
44TH – 43RD FL. (12'-9")		523 2-SIDE PL'S 12¾"x½"		528		1226 2-SIDE PL'S 12¾"x½"		678 2-SIDE PL'S 12¾"x½"		631 2-SIDE PL'S 12¾"x½"		1682 2-SIDE PL'S 12¾"x½"		1162 2-SIDE PL'S 12¾"x½"		838 2-SIDE PL'S 12¾"x½"
43RD – 42ND FL. (12'-9")	W14 X132#	538	W14 X132#	545	W14 X193#	1288 SIDE PL'S x½"	W14 X120#	694 SIDE PL'S x½"	W14 X120#	643 SIDE PL'S x½"	W14 X257#	1687 SIDE PL'S x½"	W14 X193#	1167 SIDE PL'S x½"	W14 X176#	845 SIDE PL'S x½"
42ND – 41ST FL. (12'-9")		641		666		1433 2- 12¾"		811 2- 12¾"		762 2- 12¾"		1962 2- 12¾"		1365 2- 12¾"		1021 2- 12¾"
41ST – 40TH FL. (12'-9")	W14 X176#	645	W14 X176#	683	W14 X257#	1446 2-SIDE PL'S 12¾"x½"	W14 X145#	801 2-SIDE PL'S 12¾"x½"	W14 X145#	774 2-SIDE PL'S 12¾"x½"	W14 X311#	1687 2-SIDE PL'S 12¾"x½"	W14 X233#	1570 2-SIDE PL'S 12¾"x½"	W14 X211#	1026
40TH – 39TH FL. (12'-9")		748		804		1639		943		894		2243		1567		1203
39TH – 38TH FL. (12'-9")	W14 X211#	825	W14 X233#	502	W14 X311#	1758	W14 X176#	1042	W14 X176#	994	W14 X370#	2436	W14 X283#	1708	W14 X257#	1343
38TH – 37TH FL. (12'-9")		886		554		1882		1136		1088		2623		1846		1477
37TH – 36TH FL. (12'-9")	W14 X257#	970	W14 X283#	1087	W14 X370#	2106	W14 X233#	1130	W14 X233#	1184	W14 X426#	2813	W14 X342#	1982	W14 X311#	1612
36TH – 35TH FL. (12'-9")		1043		1180		2258		1324		1278		3002		2124		1746
35TH – 34TH FL. (12'-9")	W14 X311#	1135	W14 X342#	1293	W14 X426#	2452	W14 X283#	1440	W14 X283#	1399	W14 X455#	3242	W14 X398#	2298	W14 X370#	1902
34TH – 33RD FL. (12'-9")		1208		1388		2605		1534		1494		3430		2437		2036
33RD – 32ND FL. (12'-9")	W14 X370#	1280	W14 X370#	1481	W14 X455#	2758	W14 X342#	1628	W14 X342#	1589	W14 X500#	3619	W14 X455#	2570	W14 X426#	2171
32ND – 31ST FL. (12'-9")		1353		1573		2912		1721		1684		3807		2707		2305
31ST – 30TH FL. (12'-9")	W14 X398#	1425	W14 X398#	1666	W14 X500#	3066	W14 X370#	1815	W14 X370#	1780	W14 X500#	3986	W14 X500#	2844	W14 X455#	2440
30TH – 29TH FL. (12'-9")		1498		1759		3219		1909		1875		4184		2980		2574
29TH – 28TH FL. (12'-9")	W14 X426#	1570	W14 X426#	1852	W14 X550#	3373	W14 X398#	2003	W14 X398#	1970	W14 X605#	4372	W14 X550#	3166	W14 X500#	2709
28TH – 27TH FL. (12'-9")		1643		1945		3526		2097		2065		4561		3253		2843
27TH – 26TH FL. (12'-9")	W14 X455#	1715	W14 X455#	2037	W14 X605#	3680	W14 X426#	2190	W14 X426#	2160	W14 X665#	4750	W14 X605#	3390	W14 X550#	2978
26TH – 25TH FL. (12'-9")		1788		2130		3833		2284		2256		4838		3526		3112
25TH – 24TH FL. (12'-9")	W14 X500#	1860	W14 X500#	2203	W14 X665#	3887	W14 X455#	2378	W14 X455#	2351	W14 X730#	5167	W14 X665#	3663	W14 X605#	3247
24TH – 23RD FL. (14'-9")		1943		2316		4140		2472		2446		5315		3793		3381
BELOW 23RD FL.		2183		2437		4356		2597		2574		5572		3985		3565

NOTES:
1. LEGEND E- INDICATES EXISTING COLUMNS.
N- INDICATES NEW COLUMN OR COLUMN REINFORCING
2. ALL NEW COVER PLATES SHALL BE A572-GRADE 50
3. FOR GENERAL NOTES & TYPICAL DETAILS SEE DRAWINGS S-32 & S-33
4. ALL COLUMN LOADS ARE SERVICE LOADS IN KIPS.

Salomon Brothers Inc

7 WORLD TRADE CENTER HEADQUARTERS
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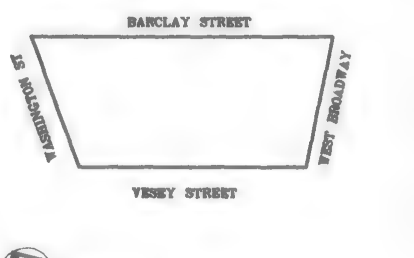

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
3	5/22/89	REVISED AS CIRCLED
2	3/1/89	REVISED AS CIRCLED
1	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
	11/21/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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COLUMN SCHEDULE #6

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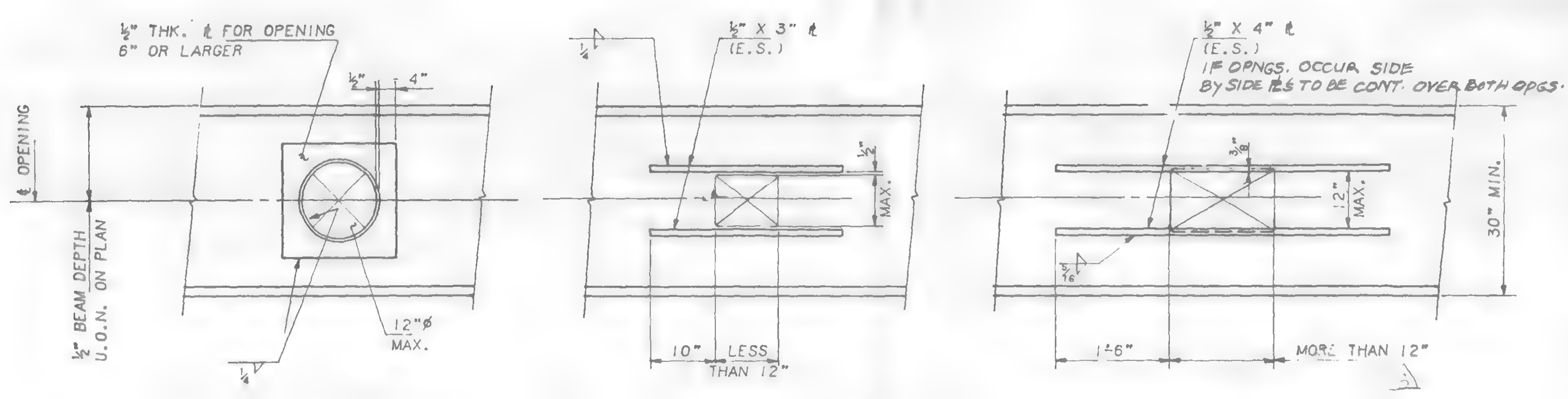
Project No.: Sheet No.
Date:
Scale:

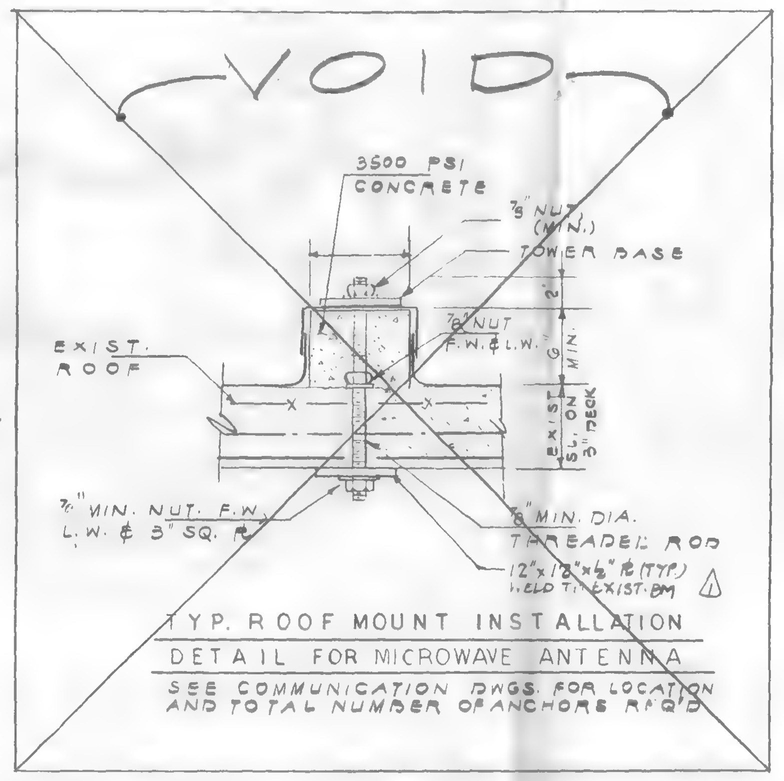
S-31

88057



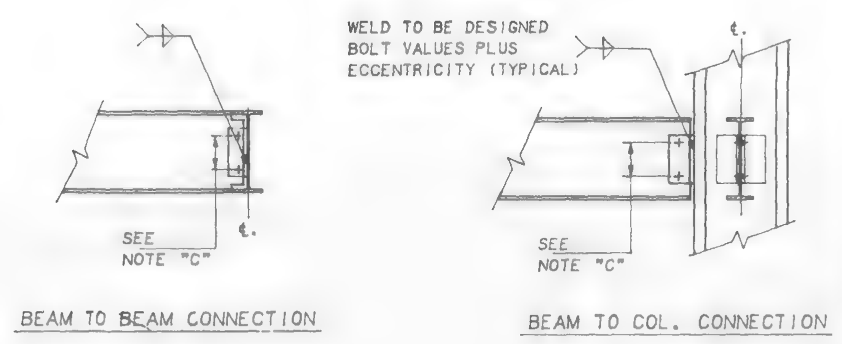
TYP BEAM OPENING DETAILS

REINF. ℄'S TO BE SAME GRADE OF STEEL AS BEAM (TYP.)



TYPICAL BEAM OPENING DETAILS

1. REINF. PL'S TO BE SAME GRADE OF STEEL AS BEAM (TYP.).
2. ALL FIELD CUT OPENINGS SHALL BE REINF. AS PER DETAILS SHOWN ABOVE, UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
3. DURING ALL FIELD CUTTING OF PENETRATIONS THRU BEAMS THE TEMPERATURE SHALL NOT EXCEED 600 DEGREES F AS MEASURED BY THE THERMOCOUPLES 6" FROM EDGE OF OPENING. @ FOUR CORNERS OF EACH OPENING
4. NEW REINF. SHALL BE IN PLACE BEFORE CUTTING OPENING IN BEAM WEB.



BEAM TO BEAM CONNECTION

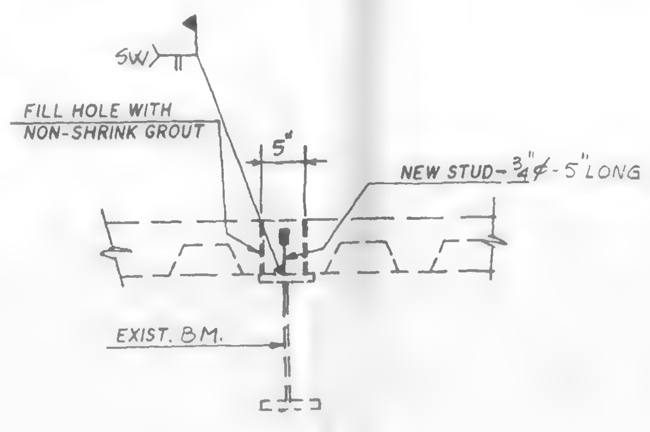
BEAM TO COL. CONNECTION

MIN. NO. OF BOLTS "N" SEE NOTE "C"	
BEAM SIZE *	"N"
W36	10
W33	9
W30	8
W27	7
W24	7
W21	6
W18	5
W16	4
W14	3
W12	3

NOTES:

1. SHEAR CONNECTION MUST BE DESIGNED FOR THE GREATEST OF THE FOLLOWING:
   A. FOR COMPOSITE BEAMS - REACTIONS FROM AISC BEAM TABLE X 2.0 AT BEAMS F_y=50 ksi X 1.5 AT BEAMS F_y=36 ksi
   B. FOR NON-COMPOSITE BEAMS - REACTIONS FROM AISC BEAM TABLE X 1.5 AT BEAMS F_y=50ksi X 1.3 AT BEAMS F_y=36ksi
   C. MINIMUM SHEAR CONNECTIONS - SEE TABLE
   D. REACTIONS INDICATED ON DRAWINGS.
2. BOLTS SHALL BE ¾" ϕ A325 FRICTION TYPE BOLTS MINIMUM (U.O.N.)
3. PROVIDE WEB REINFORCING WHERE REQUIRED DUE TO WEB CUT FOR CONNECTIONS.

TYPICAL SHEAR CONNECTION DETAILS

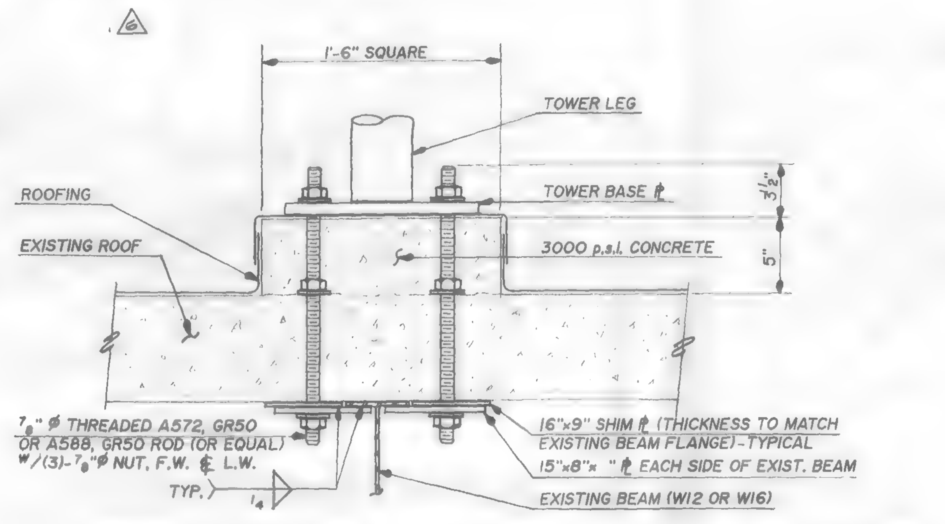


TYPICAL REINFORCING DETAIL OF EXIST. GIRDER OR BEAM

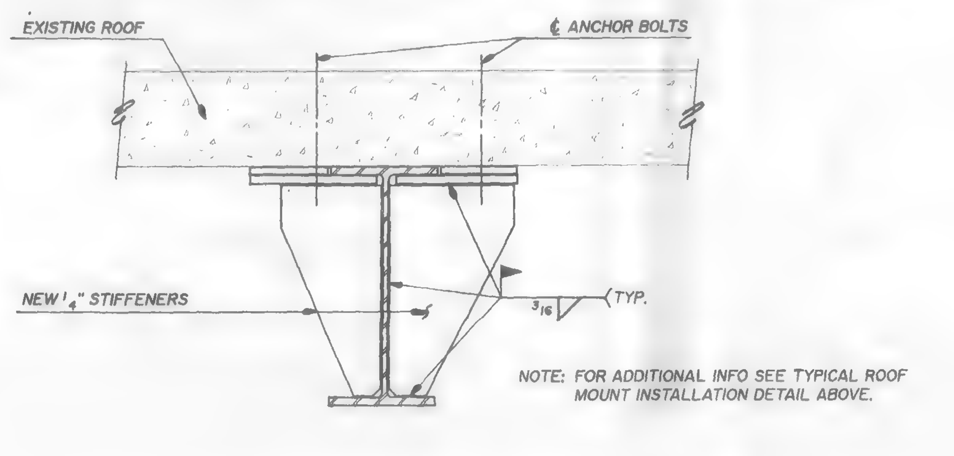
STRUCTURAL STEEL NOTES (CONTINUED):

19. WELD MINIMUM 2-⅜" FITTED STIFFENERS TO EXISTING BEAM SUPPORTING NEW STAIRHANGERS WHERE HANGERS ARE ECCENTRIC WITH RESPECT TO BEAM CENTER LINE.

20. SHORE EXISTING BEAM WHERE FITTED STIFFENERS ARE WELDED TO EXISTING BEAMS.



TYPICAL ROOF MOUNT INSTALLATION DETAIL FOR MICROWAVE ANTENNA



TYPICAL STIFFENED DETAIL AT MICROWAVE ANTENNA STEEL SUPPORT

G E N E R A L N O T E S

S T R U C T U R A L S T E E L N O T E S:

1. STRUCTURAL STEEL SHALL BE ASTM A36 HAVING A MINIMUM YIELD POINT OF 36,000 PSI OR A572 GRADE 50 (SEE PLAN NOTES).
2. AISC SPECIFICATIONS FOR "DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL" - LATEST EDITION SHALL APPLY, EXCEPT AS MODIFIED BY THE NOTES, SCHEDULES AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS.
3. WELDING ELECTRODES SHALL CONFORM TO E70XX ELECTRODES.
4. ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS.
5. ALL WELDED CONNECTIONS SHALL CONFORM TO THE RECOMMENDATIONS OF AWS D1.1 AND THE NEW YORK CITY BUILDING CODE. PROVISIONS SHALL BE MADE FOR FIELD INSPECTION AND TESTING OF WELDS. ALL SHOP WELDS SHALL BE TESTED BY ANY OF THE APPROVED METHODS AND SHALL BE CERTIFIED.
6. ALL STEEL BOLTS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS, LATEST EDITION: HIGH STRENGTH BOLTS A-325 AND UNFINISHED BOLTS A-307.
7. ALL BOLTS SHALL BE 3/4" DIAMETER MINIMUM ON HOLES 13/16" DIAMETER UNLESS OTHERWISE NOTED.
8. ALL SHOP CONNECTIONS SHALL BE WELDED.
9. ALL COLUMN SPLICES, CONNECTIONS OF BEAMS TO COLUMNS, CONNECTIONS WITHIN 3 FEET OF COLUMNS AND CONNECTIONS OF BEAMS CARRYING MACHINE LOADS SHALL BE HIGH STRENGTH BOLTED AND WELDED IN THE FIELD. OTHER FIELD CONNECTIONS MAY USE UNFINISHED BOLTS EXCEPT WHERE SPECIFICALLY SHOWN OTHERWISE IN STRUCTURAL DRAWINGS. FIELD CONNECTIONS OF NEW CONSTRUCTION TO EXISTING CONSTRUCTION SHALL BE WELDED.
10. IN ADDITION TO MOMENT CONNECTIONS, PROVIDE MINIMUM SHEAR CONNECTIONS FOR ALL GRAVITY LOADS AS SHOWN ON TYPICAL SHEAR CONNECTION DETAILS.
11. ALL ENDS OF COLUMNS AT SPLICES AND AT OTHER BEARING CONNECTIONS SHALL BE MILLED TO COMPLETE TRUE BEARING.
12. MILLED STIFFENERS SHALL BE PROVIDED UNDER ALL COLUMN CONNECTIONS AND OVER ALL COLUMNS.
13. PROVISIONS SHALL BE MADE FOR CONNECTIONS OF OTHER TRADES INCLUDING CUTTING AND PUNCHING OF STRUCTURAL MEMBERS, WHERE REQUIRED BY THE DRAWINGS, OR FOR WHICH INFORMATION IS FURNISHED PRIOR TO FABRICATION.
14. THE USE OF CUTTING TORCH IN THE FIELD WILL BE PERMITTED ONLY AFTER SECURING ENGINEER'S APPROVAL.
15. CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING REQUIRED TO MAINTAIN PLUMBNESS AND STABILITY DURING ERECTION.
16. CONTRACTOR SHALL PROVIDE STIFFENERS PER SECTION 1.15.5 OF AISC SPECIFICATIONS REGARDING THE NEED FOR COLUMN STIFFENERS.
17. ALL WELDERS TO BE LICENSED BY THE CITY OF NEW YORK.
18. FOR PAINTING OF STRUCTURAL STEEL SEE SPECIFICATIONS.

STEEL DECK NOTES:

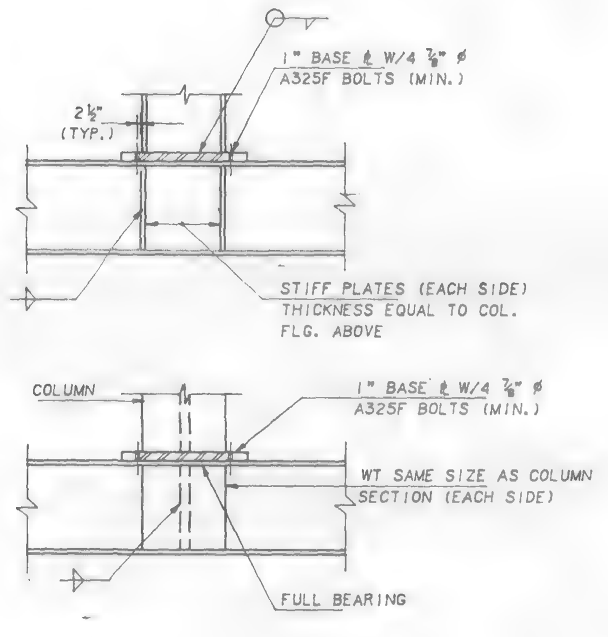
1. STEEL DECK SHALL CONFORM TO THE CURRENT SPECIFICATIONS FOR THE DESIGN OF LIGHT GAUGE COLD FORMED STEEL STRUCTURAL MEMBERS PER AISI.
2. DECK SHALL BE ANCHORED BY WELDING THROUGH THE BOTTOM OF THE RIB TO STRUCTURAL STEEL AT MAXIMUM SPACINGS OF 12" WITH MINIMUM BEARING OR END LAP OF 2".
3. OPENING IN DECK SHALL BE TREATED AS FOLLOWS:
   A. FOR HOLES 6" OR LESS, PERPENDICULAR TO SPAN. NO REINFORCING REQUIRED.
   B. FOR HOLES OVER 6" BUT NOT MORE THAN 10". PROVIDE ONE 14 GAUGE REINFORCING PLATE 24" X 24" AND WELD IN PLACE.
   C. ALL OTHER OPENINGS TO BE FRAMED AS SHOWN ON PLAN.
4. STEEL DECK SHALL BE AS NOTED ON FRAMING PLAN.

SUPERSTRUCTURE CONCRETE NOTES:

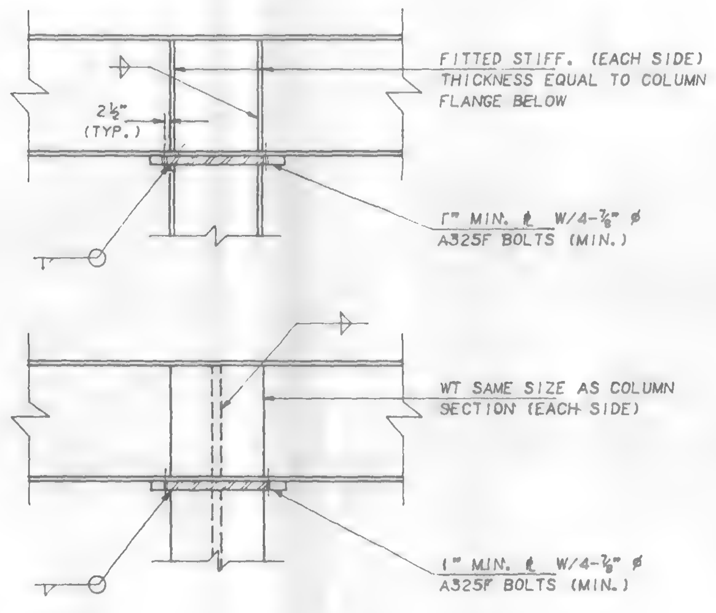
1. ALL CONCRETE OVER METAL DECK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS U.O.N.
2. ALL CONCRETE IS TO COMPLY WITH ALL REQUIREMENTS OF CURRENT ACI CODE AND ALL OTHER RELEVANT SECTIONS OF THE NEW YORK CITY BUILDING CODE.
   A. PRELIMINARY TESTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND THE PORT AUTHORITY FOR REVIEW. NO CONCRETE SHALL BE PLACED BEFORE SUCH REVIEW HAS BEEN COMPLETED.
   B. LABORATORY TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND THE PORT AUTHORITY.
3. CONTRACTOR SHALL VERIFY DIMENSIONS AND LOCATIONS OF ALL OPENINGS, PIPE SLEEVES, ANCHOR BOLTS, ETC., AS REQUIRED BY ALL TRADES BEFORE CONCRETE IS PLACE.
4. ALL STRUCTURAL DRAWINGS SHALL BE WORKED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND ANY DISCREPANCIES SHALL BE COORDINATED WITH THE ARCHITECT.
5. NO DEVIATION FROM THE STRUCTURAL PLANS SHALL BE PERMITTED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE STRUCTURAL ENGINEER. ALL REINFORCING DETAILS TO BE SUBMITTED TO THE ENGINEER FOR HIS APPROVAL.
6. TRANSPORTING, PLACING, CURING AND DEPOSITING CONCRETE SHALL COMPLY WITH THE NEW YORK CITY BUILDING CODE AND THE ACI BUILDING CODE.

GENERAL NOTE:

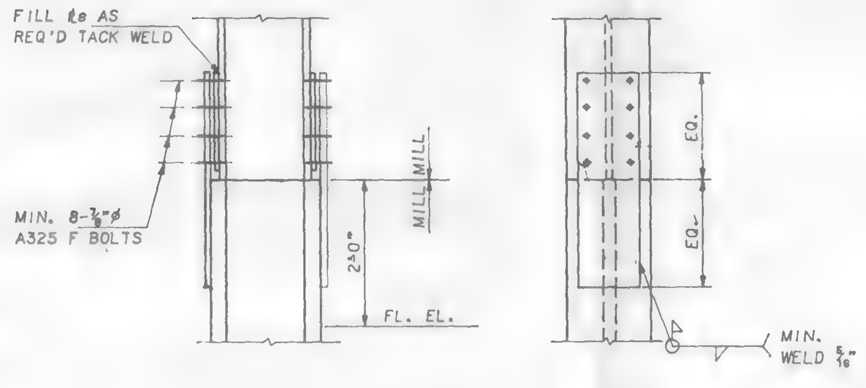
CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS. THIS VERIFICATION SHALL INCLUDE A SURVEY BY A LICENSED SURVEYOR AND FIELD INVESTIGATIONS TO DETERMINE THE LOCATIONS AND ELEVATIONS OF THE EXISTING STRUCTURAL STEEL. THE LOCATION AND ELEVATIONS OF EXISTING SLABS SHALL ALSO BE VERIFIED. THE CONTRACTOR SHALL SUBMIT A WRITTEN REPORT AND SURVEY TO THE ENGINEER FOR HIS REVIEW AND/OR INSTRUCTIONS OF ACTUAL FIELD CONDITIONS WHICH MAY VARY FROM INFORMATION INDICATED ON THE DRAWINGS. THESE REPORTS WILL ALSO INCLUDE EXISTING CONDITIONS NOT SHOWN ON THE DRAWINGS WHICH MAY REQUIRE A REVISION OF THE INFORMATION ON THE DRAWINGS.



TYPICAL DETAIL FOR COLUMN OR POST PICK-UP



TYPICAL DETAIL FOR BEAM OVER COLUMN



TYPICAL COLUMN SPLICE DETAIL

Salomon Brothers Inc

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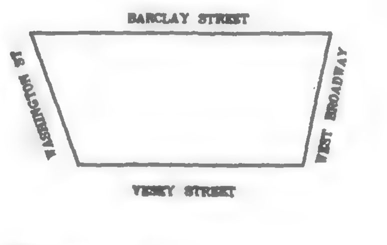

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
	6.9.95	AS BUILT-REF. REV. 6/11.5.93
	8/23/94	ISSUED FOR TENANT ALTERAT.
	7/22/94	RESPONSE TO P.A. COMMENTS
8	5/25/94	RESPONSE TO P.A. COMM'TS
7	4/6/94	REVISED AS CIRCLED
6	11/3/93	REVISED AS CIRCLED
5	10/4/93	CHILLED WATER LINE RELOCATION
4	6/2/93	ISSUED FOR ADDENDUM No. 1
3	5/21/93	ISSUED FOR TENANT ALTERATIONS
2	4/6/89	REVISED AS CIRCLED
1	3/1/89	REVISED, AS CIRCLED
	1/3/89	ISSUED FOR CONST.
	12/19/88	SUBMITTED TO P.A.
	11/21/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS
	10/31/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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TYPICAL SUPERSTRUCTURE DETAILS & GENERAL NOTES

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Project No.:
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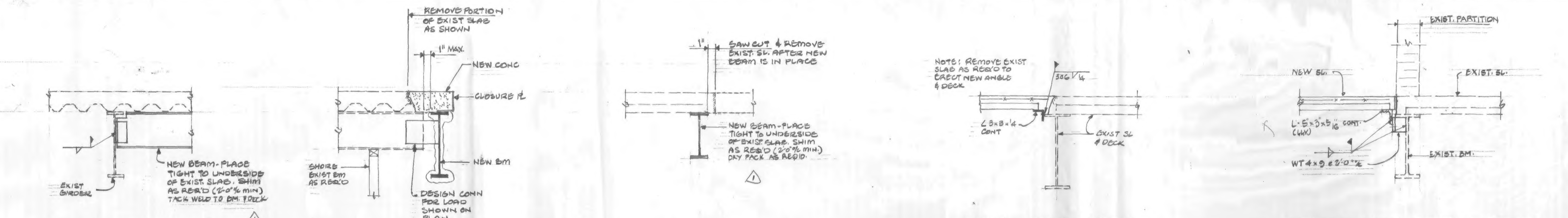


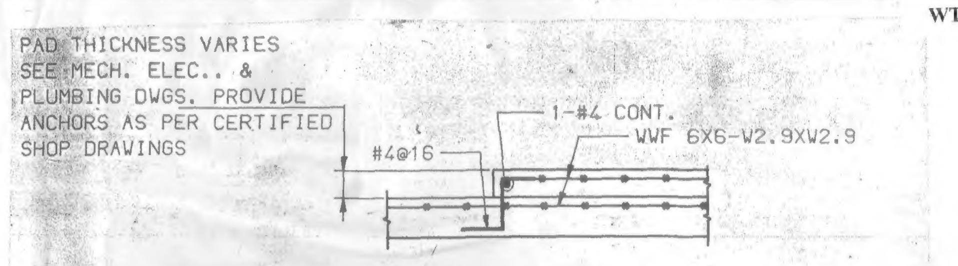
TYPICAL NEW BEAM TO EXIST. BEAM CONN DETAIL

TYPICAL EXIST. BEAM TO NEW BEAM CONN. DETAIL

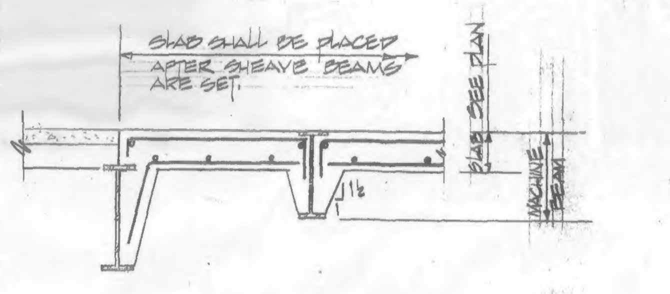
TYPICAL SLAB EDGE AT NEW OPNG DETAIL

TYPICAL EXIST. OPENING CLOSURE DETAIL (FOR DECK ORIENTATION SEE PLAN)

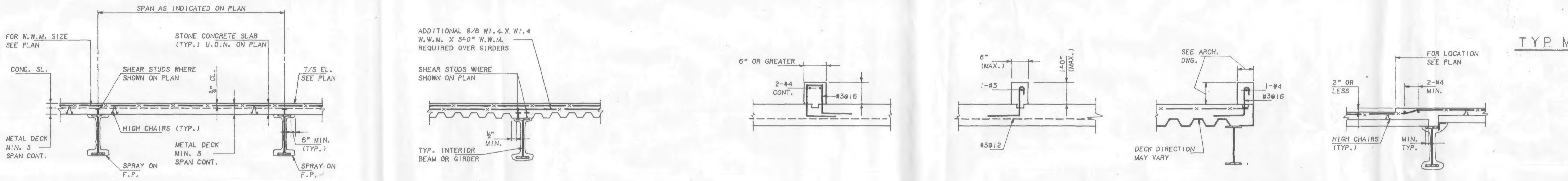
TYPICAL EXIST OPENING DETAIL WHERE EXIST PARTITIONS REMAIN (FOR DECK ORIENTATION SEE PLAN)



TYP. DETAIL OF EQUIPMENT PAD ON SLAB



TYP. MACH. ROOM SLAB DET.



NOTE: ALL SINGLE SPAN DECK MUST BE SHORED.

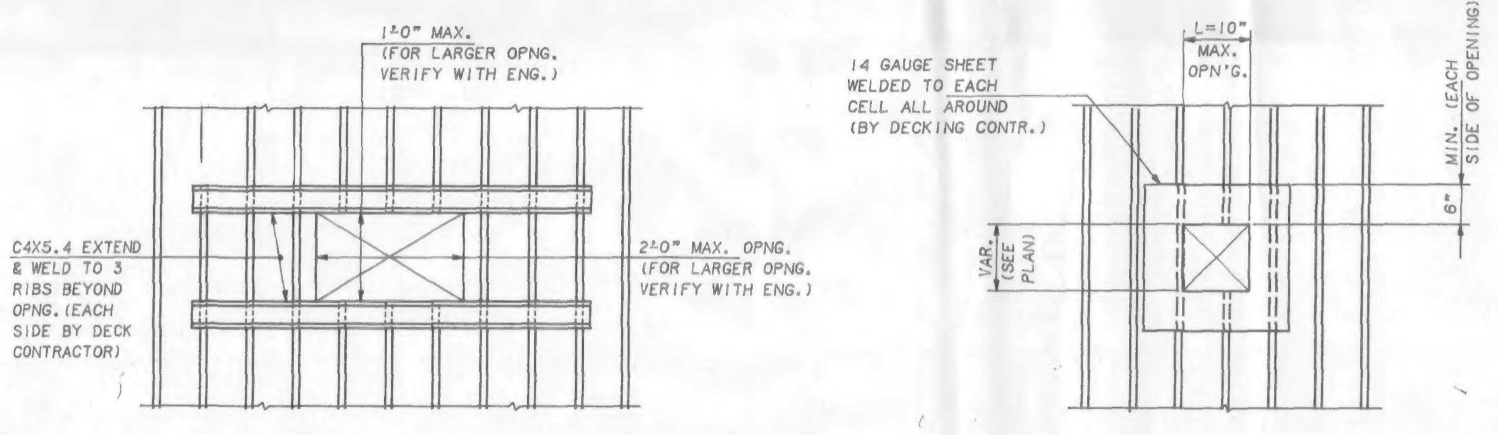
TYPICAL FLOOR DETAIL

DETAILS PERPENDICULAR TO FLOOR SPAN

TYPICAL CONCRETE CURB DETAILS

NOTE: FOR LOCATION SEE ARCH. DWGS

TYP. DROP IN SLAB DETAIL



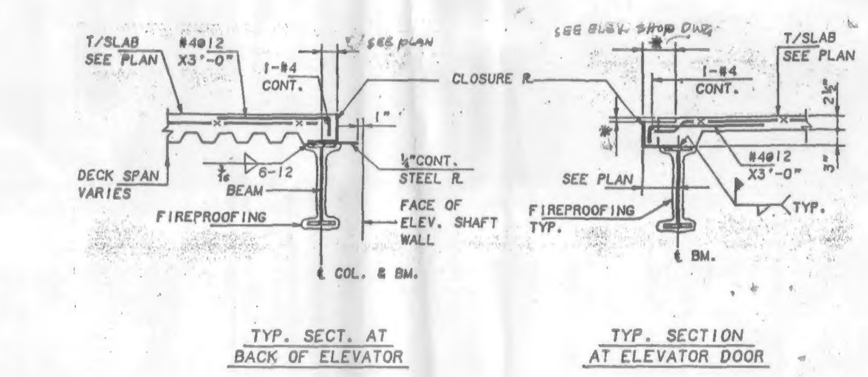
NO REINF. REQUIRED FOR HOLES 6" ∅ OR LESS PROVIDE CONCRETE STOP AT ALL OPENINGS

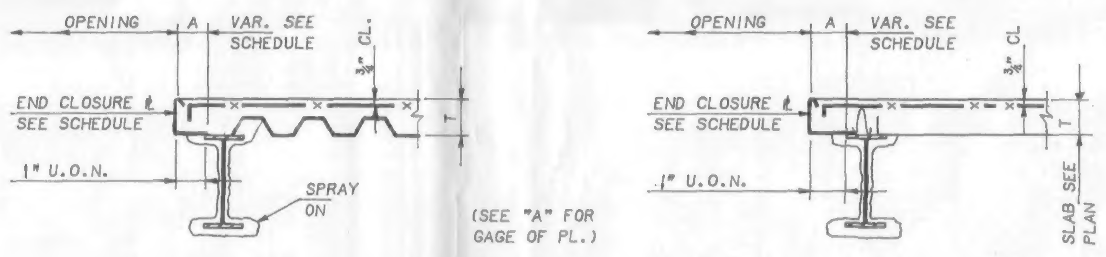
FOR OPENINGS TO 2'-0" PERPENDICULAR TO DECK

NO REINF. REQUIRED WHERE "L" IS 6" OR LESS IN DIRECTION PERPENDICULAR TO DECK

FOR OPENINGS TO 10" PERPENDICULAR TO DECK

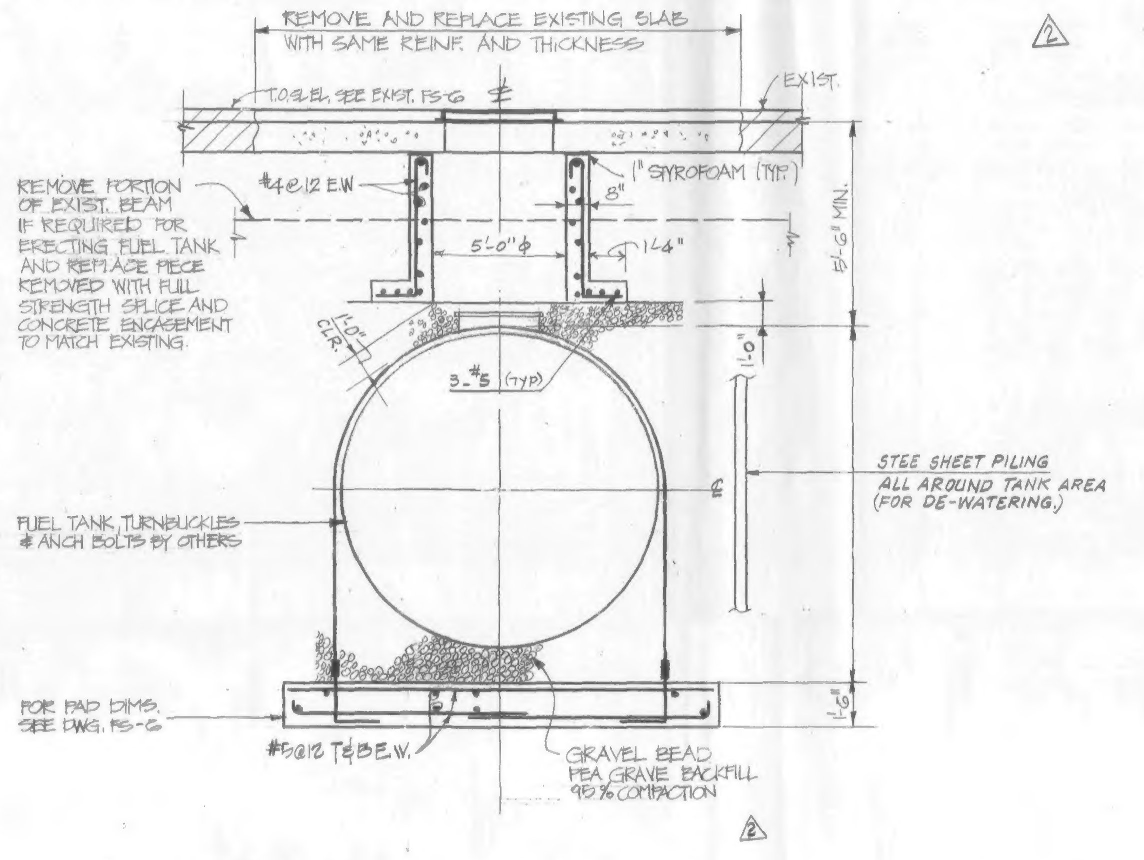
TYPICAL FLOOR DETAILS AT OPENINGS



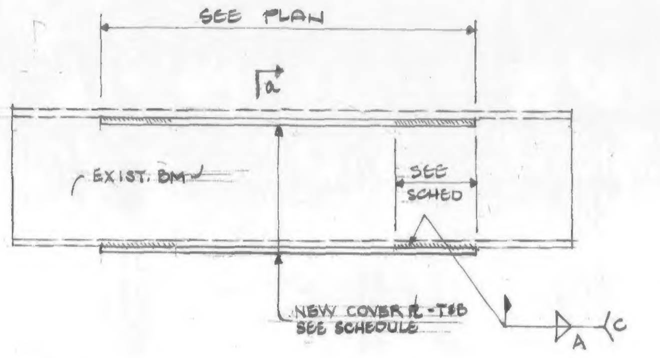


TYPICAL DETAILS OF BEAMS AT OPENING

T=5½"		T=8"		REMARKS
A	GAGE OF PLATE	A	GAGE OF PLATE	
UP TO 4"	14	UP TO 3½"	12	
4" TO 8"	12	4" TO 7"	10	
8" TO 10"	10			

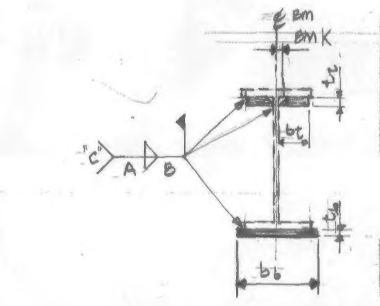


TYP. SECTION @ NEW FUEL TANK (@ 1 ST. FLOOR LOADING DOCK- FOR LOCATION SEE MECH. AND ARCH. DWG'S)



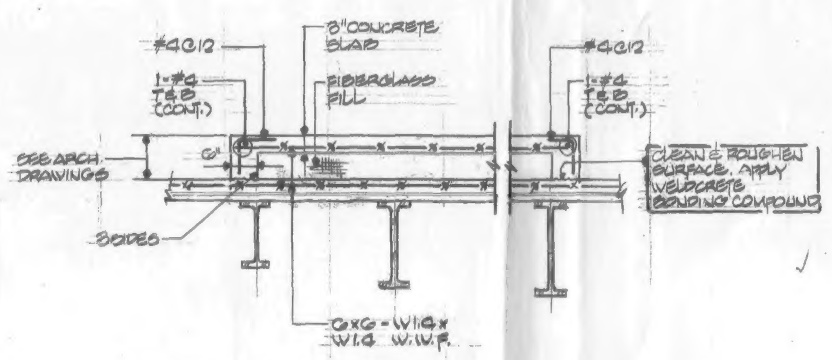
TYPICAL COVER PLATE REINF. DETAIL

NEW COVER ℄ SHEDULE						
MARK	BOTTOM FLANGE $b_b \times t_b$	TOP FLANGE 2-$b_t \times t_t$	FILLET WELD "A"	INTERMITTENT WELD SPACING "B"	CONT. TERMINATION WELD AT EACH END "C"	REMARKS
CP1	9x1½	2-2¾x1	¼	6@12	1'-6"	
CP2	9x1¼	2-2¾x1	¼	6@12	1'-6"	
CP3	9x1	2-2¾x1	¼	6@12	1'-6"	
CP4	9x¾	—	¼	6@12	1'-4"	
CP5	5x½	—	¼	6@12	1'-0"	
CP6	9x1	—	¼	6@12	1'-6"	
CP7	11x½	2-2¾x1	¼	6@12	1'-10"	
CP8	8x½	—	¼	6@12	1'-4"	
CP9	7x½	—	¼	6@12	1'-2"	
CP10	11x2	2-3½x1½	5/16	6@12	1'-10"	
CP11	12x1½	2-4x2	5/16	6@12	2'-0"	
CP12	12x1½	2-4x2	5/16	6@12	2'-0"	
CP13	6x¾	—	¼	6@12	1'-0"	
CP14	11x¾	—	¼	6@12	1'-6"	
CP15	12x¾	—	¼	6@12	2'-0"	
CP16	18x1	—	5/16	6@12	3'-0"	
CP17	7x⅝	—	¼	6@12	1'-2"	
CP18	10x1¼	2-2¾x1¼	5/16	6@12	1'-8"	
CP19	10x1½	2-2¾x1¼	5/16	6@12	1'-8"	
CP20	8x1	2-2¾x1	5/16	6@12	1'-8"	
CP21	14x1½"	—	5/16	6@12	2'-4"	
CP22	14x1¼	2-2¾x1¼	5/16	6@12	2'-4"	
CP23	14x1½	—	5/16	6@12	2'-4"	Fy=36ksi
CP24	10x1	—	5/16	6@12	1'-8"	
CP25	7½x1	2-2x1¼	5/16	CONT.	1'-3"	
CP26	6x¾	2-1½x¾	5/16	6@12	1'-0"	
CP27	14x1½	2-4x2	5/16	6@12	2'-4"	

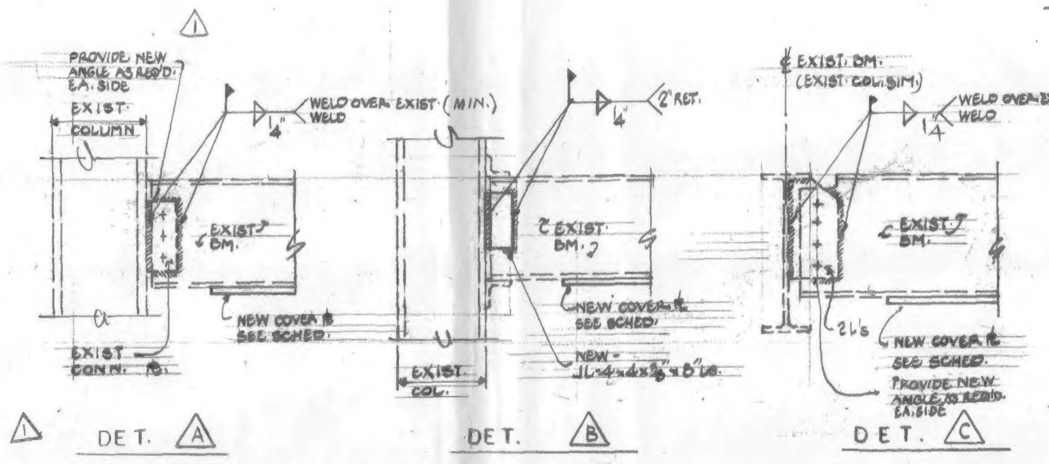


NOTES: ALL NEW PLATES TO BE f_y=50KSI UNLESS OTHERWISE SHOWN ON PLAN.

SECT 'a-a'



RAISED SLAB DETAIL



TYPICAL EXIST. CONNECTION REINF. DETAILS AT COVER PLATED BEAMS

1. CONNECTION REINFORCEMENT TO BE DESIGNED BASED ON LRFD HAND BOOK FOR ULTIMATE LOAD AS SHOWN ON PLAN OR MINIMUM AS SHOWN ON DETAIL.
2. ADD ADDITIONAL ANGLES OR PLATE AS REQ'D TO REINFORCE CONNECTION

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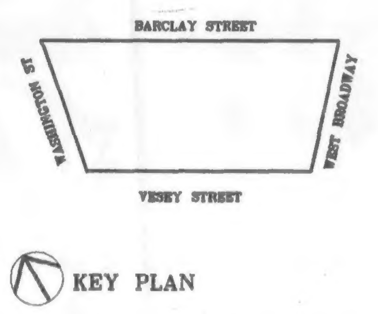

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
3	6/9/89	REVISED AS CIRCLED
2	4/6/89	REVISED AS CIRCLED
1	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST
	12/22/88	SUBMITTED TO P.A.
	12/19/88	SUBMITTED TO P.A.
	11/21/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG. MODIFICATIONS
	10/31/88	SUBMITTED TO P.A. FOR APPROVAL OF BASE BLDG MODIFICATIONS
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG. MODIFICATIONS

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TYPICAL SUPERSTRUCTURE DETAILS

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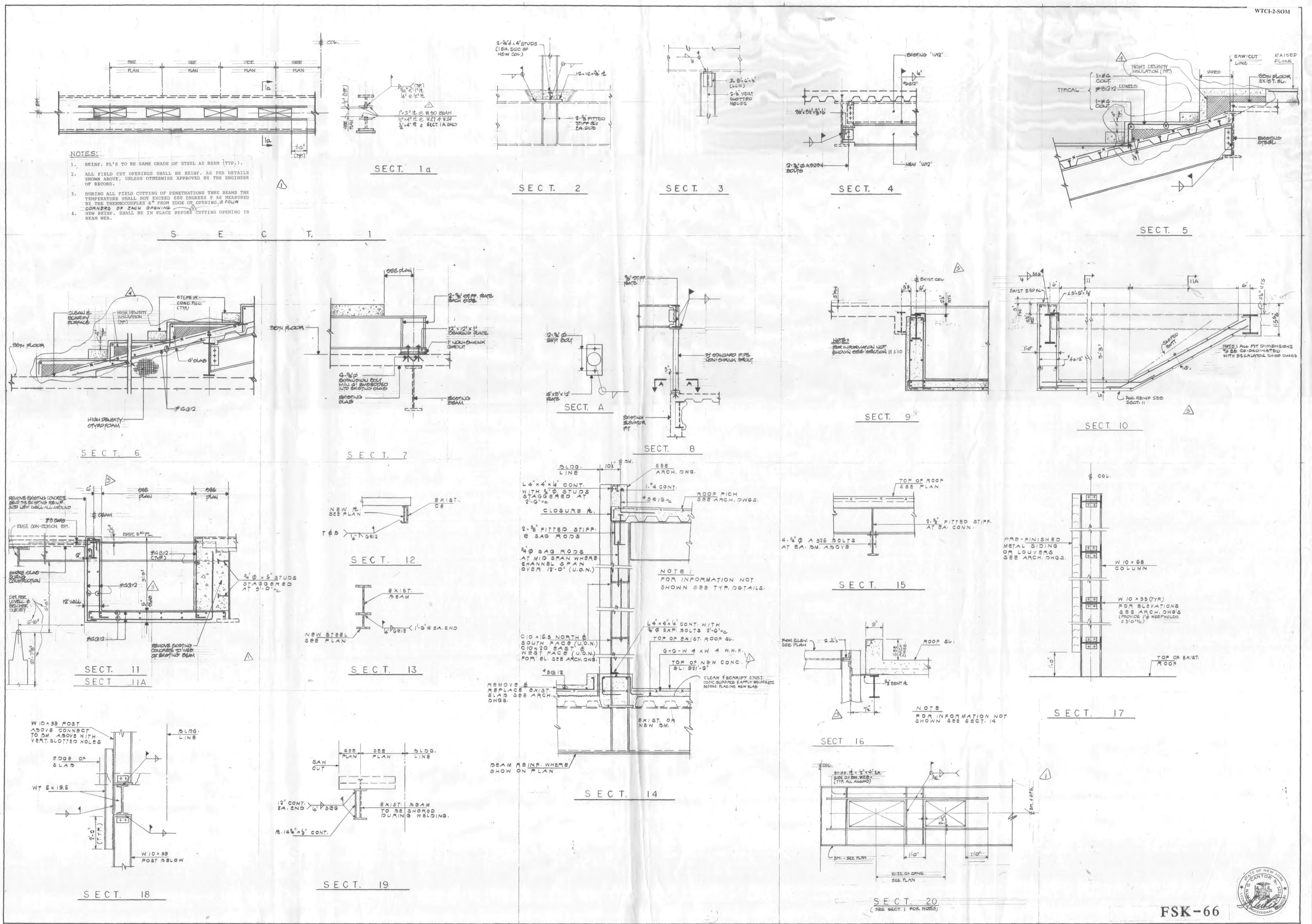

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KEY PLAN

BARCLAY STREET
VESEY STREET
WEST BROADWAY

NOTES

LEGEND

No.	Date	Revision
4	8-10-89	ISSUED FOR FIELD SKETCH
3	5-22-89	REVISED AS CIRCLED
2	4/6/89	REVISED AS CIRCLED
1	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
	12/19/88	SUBMITTED TO P.A.
	11/21/88	ISSUED TO PORT AUTHORITY FOR APPROVAL OF BASIC BUILDING MODIFICATIONS
	10/31/88	ISSUED TO PORT AUTHORITY FOR APPROVAL OF BASIC BUILDING MODIFICATIONS
	10/17/88	SUBMITTED TO PORT AUTHORITY FOR APPROVAL OF BASE BLDG MODIFICATION

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SUPERSTRUCTURE SECTIONS #1

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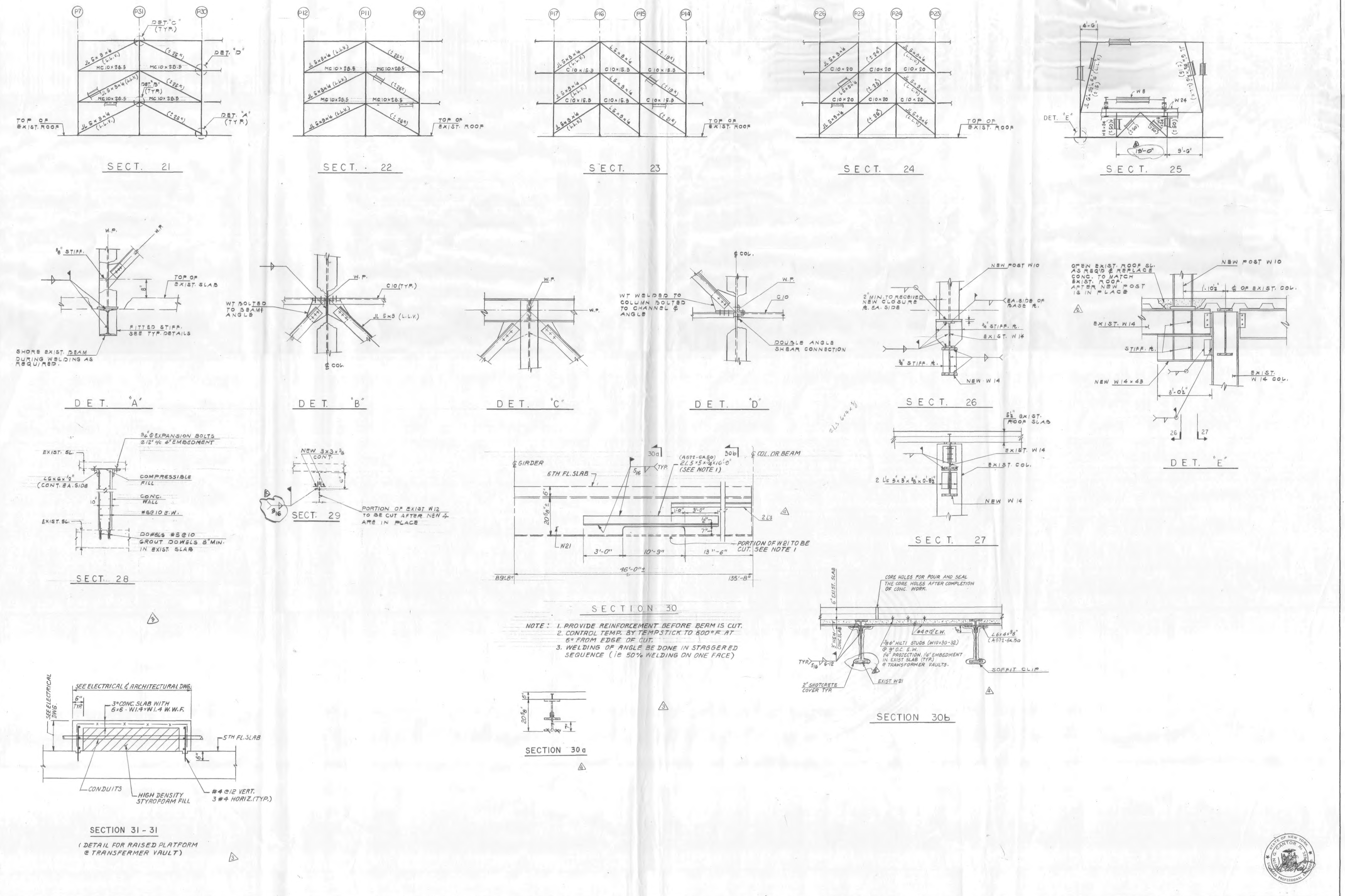

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KEY PLAN

NOTES

LEGEND

No.	Date	Revision
5	8/19/88	REVISED AS CIRCLED
4	5-22-88	REVISED AS CIRCLED
3	4-6-89	REVISED AS CIRCLED
	4-4-89	ISSUED FOR CON'D...
2	1/20/89	REVISED AS CIRCLED
	1/3/89	ISSUED FOR CONST.
1	12/8/88	[illegible]

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SUPERSTRUCTURE SECTIONS #2

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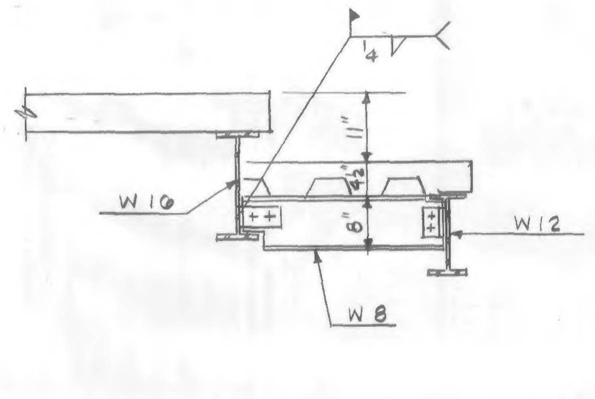
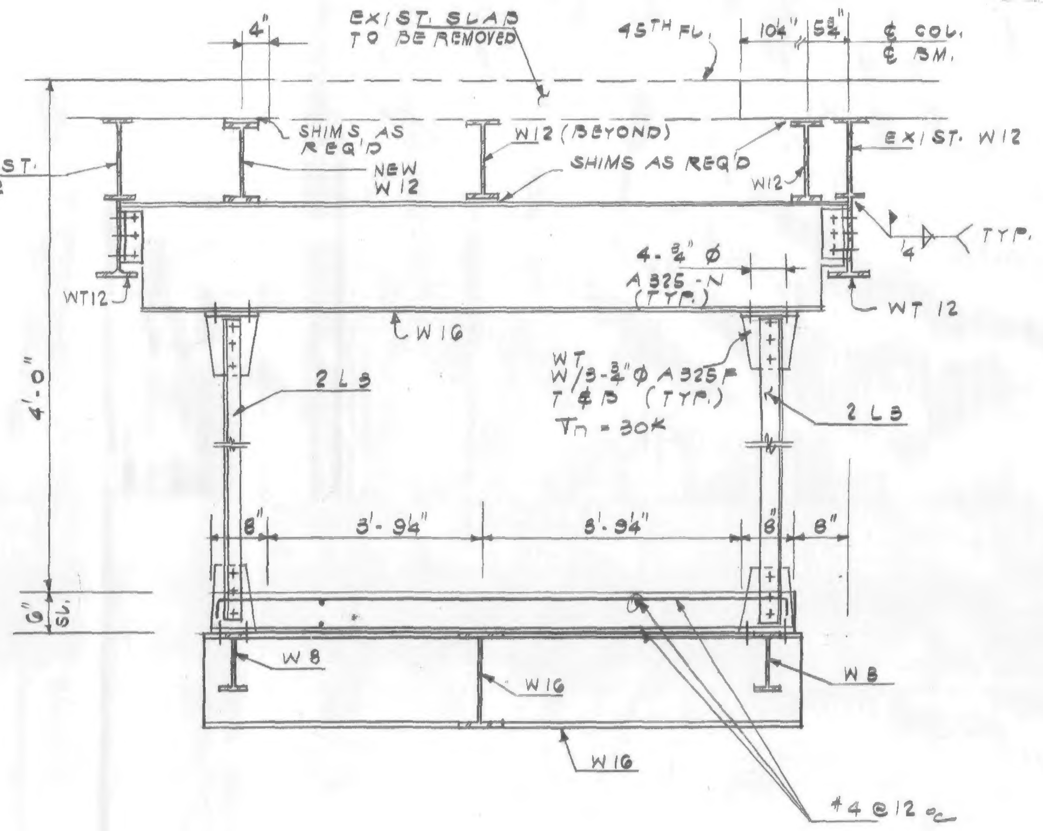


SECT. 32
(SECTION AT 41 & 43RD FL. BALCONY)



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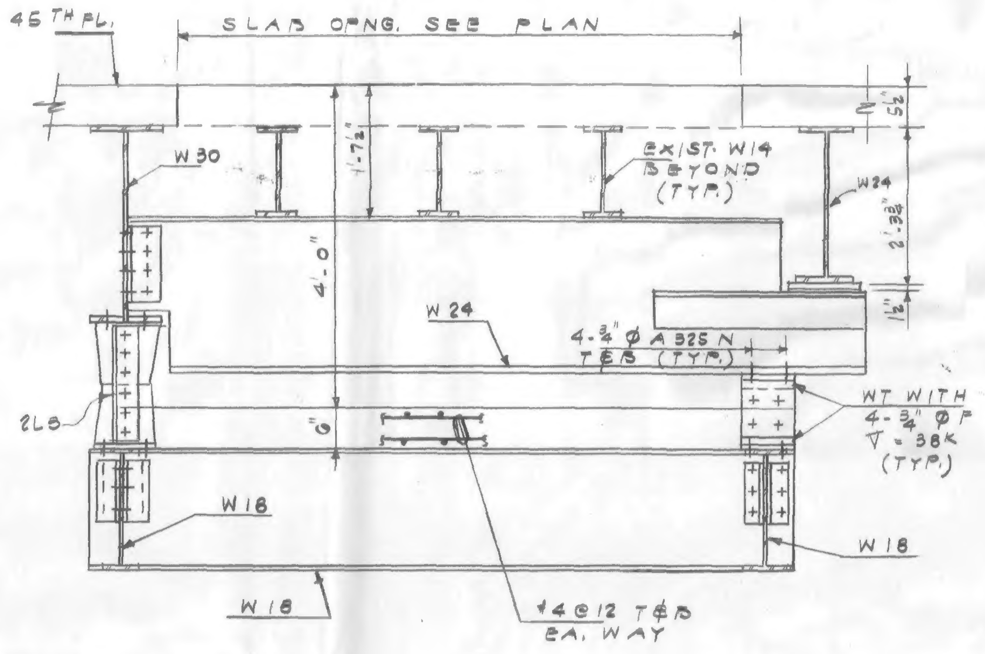

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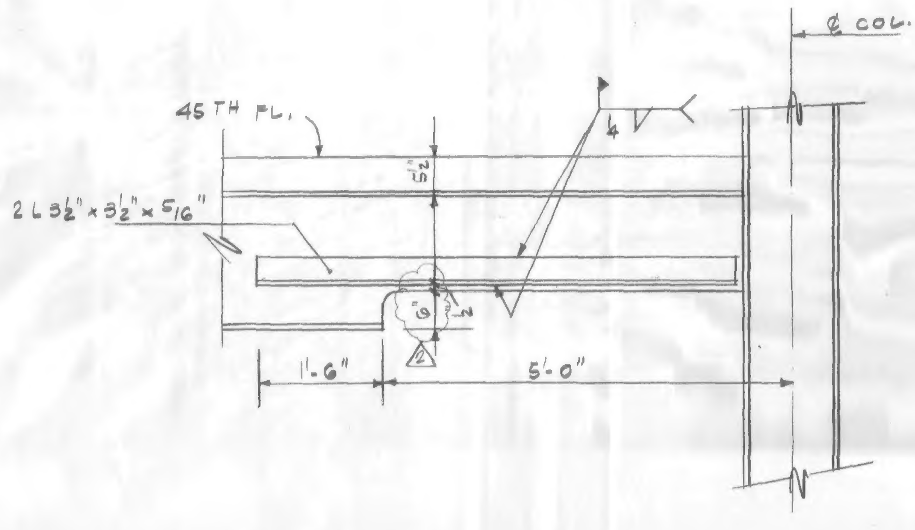

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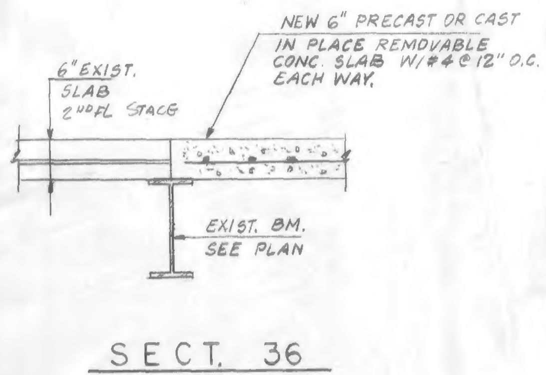

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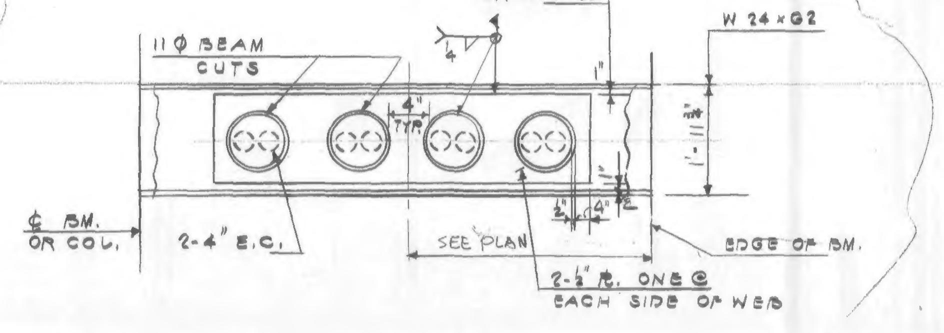

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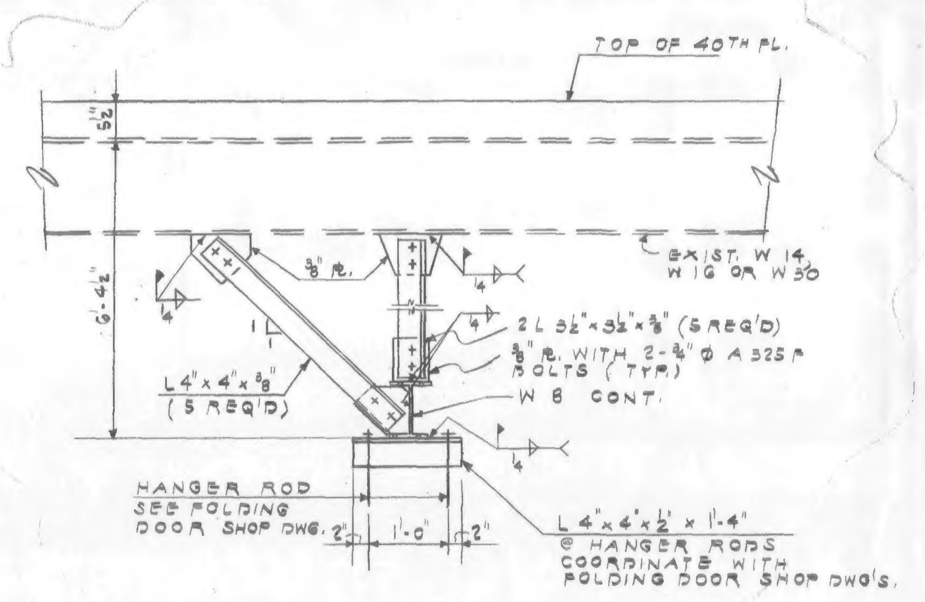

SECT. 38

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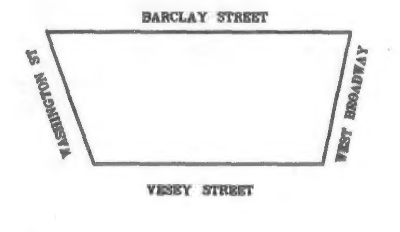

KEY PLAN

NOTES

LEGEND

No.	Date	Revision
3	3/30/90	REVISED AS CIRCLED
2	8/15/89	REVISED AS CIRCLED
1	5-22-89	REVISED AS CIRCLED
	4-6-89	

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SUPERSTRUCTURE SECTIONS #3

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